CALIFORNIA COASTAL COMMISSION

South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

Th8a

Filed:	September 5, 2000
49th Day:	October 24, 2000
180th Day:	March 4, 2001
Staff:	KFS-LB
Staff Report:	December 22, 2000
Hearing Date:	January 9-12, 2001
Commission Action:	

STAFF REPORT: REGULAR CALENDAR

APPLICATION NUMBER: 5-99-260

APPLICANT: MT No. I LLC, Attn: Jim Johnson & William R. Brasher, Esq.

AGENTS: Donna Andrews, Lee Andrews Group
J.P. Batmale, Lee Andrews Group
Steve Apodaca, Apodaca & Associates
William Boyd, Esq., Law Office of William Boyd
Michael Burke, Robert Bein, William Frost & Associates
Norbert Dall, Dall & Associates
Stephanie D. Dall, Dall & Associates
Roderick Meade, RJ Meade Consulting
Nancy Lucast, Lucast Consulting
Mark Dodero, RECON
Mark R. McGuire, Esq., Hewitt & McGuire, LLP
Eileen Padburg, Eileen Padburg Consulting

PROJECT LOCATION: Northwest of the intersection of Avenida Pico and N. El Camino Real, City of San Clemente (Orange County)

PROJECT DESCRIPTION: Request for authorization to make permanent the bluff stabilization grading undertaken under Emergency Coastal Development Permit 5-90-274-G. In addition, residential and commercial development, public park, trails and open space and associated infrastructure including roads and utilities on the 189.6 acre portion of the Marblehead property within the coastal zone. Included are a property subdivision; 4.95 million cubic yards of grading including site preparation and remedial grading; construction of several thousand linear feet of loffelstein walls within the canyons; construction of 424 single family homes as a private gated community with a private road network that will include 3 bridges; construction of 84,313 square feet of commercial space in 8 commercial buildings with 1,504 parking spaces, including internal circulation roads and 2 bridges; dedication of a 9.4 acre bluff park; establishment of 58.3 acres of other private open space including pedestrian and bicycle trails; construction of a new public road (Avenida Vista Hermosa) including one bridge; widening of El Camino Real including construction of a retaining wall along an existing Blochman's dudleya reserve and construction of sidewalks and bicycle lanes; widening of Avenida Pico including sidewalks and bicycle lanes; dedication of an off-site 1.1 acre beachfront property for public access; construction of a storm water management and flood control system; dedication of 1.0 acre of land for visitor serving commercial use; contribution of money to the City of San Clemente for downtown business district improvements, park improvements, public facility improvements, and off-site circulation improvements. Also, the applicant is proposing impacts to certain habitat areas including 14.37 acres of 17.34 acres of coastal sage scrub, 0.31 acres of 0.31 acres of needlegrass grasslands, 0.08 acres of 0.59 acres of alkali meadow wetlands in the coastal zone, 0.01 acres of 0.21 acres of seasonal wetlands in the coastal zone, and 3,600

individuals of Blochman's dudleya. In addition to these impacts which will occur under the development now proposed the applicant is proposing to make permanent the impacts to habitat that occurred under Emergency Coastal Development Permit G5-90-274. These impacts include 3 acres of coastal bluff scrub, 2.5 acres of needlegrass grassland, 0.1 acres of wetlands, and 3.5 acres of Blochman's dudleya (estimated 6,500 to 10,700 individuals). Mitigation for the proposed impacts to biological resources include on-site mitigation of 16.57 acres of coastal sage scrub on the graded slopes of Marblehead Canyon and the western canyon; off-site acquisition of development rights and establishment of a conservation easement over 50 acres of land containing 30 acres of existing coastal sage scrub and 12 pairs of California gnatcatchers; translocation of 0.3 acres of needlegrass habitat to Marblehead Canyon and the Blochman's dudleya reserve; mitigation of impacts to 0.08 acres of alkali meadow wetlands with the creation of 0.16 acres of alkali meadow wetlands on-site; mitigation of 0.01 acres of seasonal wetlands impacted with 0.028 acres of seasonal wetlands on-site; mitigation for impacts to the Blochman's dudleya by completing a translocation plan being implemented under Coastal Development Permit 5-97-136; contribution of $100,000 to the property owner's association for long-term on-site habitat management; contribution of $106,000 for management of off-site mitigation areas.

SUMMARY OF STAFF RECOMMENDATION:

Staff recommends **DENIAL** of the proposed development because it is not in conformity with Sections 30213, 30221, 30222, 30223, 30230, 30231, 30233, 30240, 30252, and 30253 of the Coastal Act. The proposed development entails large-scale grading that would dramatically transform the natural landforms on the site. For example, the proposed project will grade and fill the slopes of two canyons on the project site in order to expand the area of development for single family residences. Some fill slopes within the canyons will be steepened through the use of mechanically stabilized earth structures (a.k.a. loffelstein walls). The result of this grading, filling, and use of loffelstein walls will narrow the width of the canyons and steepen the canyon walls. These landform alterations will have adverse visual impacts. Grading and construction of walls within the canyon will occur within 5 to 30 feet of existing wetlands. This grading and construction will eliminate existing native vegetation which provides a buffer for the existing wetlands. In addition, grading and construction within the canyons will eliminate existing Blochman's dudleya, a rare plant. The proposed development will also commit 110 acres of land suitable for either visitor serving commercial development or lower cost public recreation opportunities for residential development, a low priority use under the Coastal Act. Finally, the applicant has not submitted sufficient information to allow the Commission to adequately evaluate the impacts of the proposed development on native habitat, wetlands, hydrology, geologic stability, and water quality.

FEDERAL CONSISTENCY:

The proposed project site includes property located inland of the coastal zone boundary. The proposed development on that portion of the property would require a permit from the Corps of Engineers pursuant to Section 404 of the Clean Water Act. Section 307(c)(3)(A) of the Coastal Zone Management Act provides that:

> *Any applicant for a required Federal license or permit to conduct an activity, in or outside of the coastal zone affecting any land or water use or natural resource of the coastal zone of that state shall provide in the application to the licensing or permitting agency a certification that the proposed activity complies with the enforceable policies of the state's approved program and that such activity will be conducted in a manner consistent with the program. At the same time, the applicant shall furnish to the state or its designated agency a copy of the certification, with all the necessary information and data.*

A Section 404 permit is listed in the California Coastal Management Program as a permit for activities that are likely to affect coastal zone uses and resource, and thus requires a consistency certification. In this case, development inland of the coastal zone and its associated facilities could potentially affect water supply to wetlands within the coastal zone, species migration to the coastal zone, and visual resources of the coastal zone. Therefore, that development may require Commission concurrence with a consistency certification before the Corps can issue its permit for any part of the development.

OTHER AGENCY APPROVALS RECEIVED: City of San Clemente Design and Architectural Review, General Plan Amendment 96-02, Specific Plan 95-02, Tentative Subdivision TTM 8817, Planned Residential/Commercial Development Approval, Site Plan Permit 97-16 and 99-16, Conditional Use Permit 99-17 and Sign Exception Plan 99-18 ; California Regional Water Quality Control Board, San Diego Region, Action on Request for Clean Water Act section 401 Water Quality Certification for Discharge of Dredged and/or Fill Materials, Order for Standard Certification dated August 1, 2000;

SUBSTANTIVE FILE DOCUMENTS: See Appendix A

STAFF RECOMMENDATION:

Staff recommends that the Commission DENY a coastal development permit for the proposed development by voting NO on the following motion and adopting the following resolution.

MOTION

> *"I move that the Commission approve Coastal Development Permit 5-99-260 for the development proposed by the applicant."*

Staff recommends a **NO** vote. This will result in denial of a coastal development permit and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

RESOLUTION

I. DENIAL

The Commission hereby **DENIES** a coastal development permit for the proposed development on the ground that the development will not conform with the policies of Chapter 3 of the Coastal Act and will prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit would not comply with the California Environmental Quality Act because there are feasible mitigation measures or alternatives that would substantially lessen the significant adverse impacts of the development on the environment.

II. FINDINGS AND DECLARATIONS:

The Commission hereby finds and declares:

A. SITE AND PROJECT DESCRIPTION

The Marblehead site is a 250 acre property (189.6 acres in the coastal zone) located between El Camino Real (a.k.a. Pacific Coast Highway) to the southwest, Avenida Pico to the northeast, the Interstate 5 freeway to the northeast, and the Colony Cove residential subdivision to the southwest (Exhibit 1). The site is roughly rectangular and consists of an upland bluff top mesa which is incised by one large canyon (Marblehead Canyon) and several smaller canyons and drainages (Exhibit 2). The southwestern boundary of the project site (along El Camino Real) consists of 70 to 100 foot high coastal bluffs which are intersected by the mouths of the on-site canyons and drainages. The bluff is separated from the beach by El Camino Real, train tracks, and a private gated mobile home park (Capistrano Shores), therefore, the bluffs do not provide direct access to the beach. The closest beach access is at North Beach, which is across the street and south of the bluffs. North Beach contains a Metrolink train station, beach parking and is a popular beach area. The project site is the last large vacant parcel in the coastal zone in the City of San Clemente.

The applicant is proposing a comprehensive residential and commercial development, public park, trails and open space and associated infrastructure including roads and utilities on the 250 acre Marblehead site in the City of San Clemente, Orange County (Exhibit 3). While the project is an integrated development, only 189.6 acres are located within the coastal zone, therefore, only the portion of the development in the coastal zone requires a coastal development permit. The portion of the project outside the coastal zone may require Federal consistency review (see previous note). Included in the development are a property subdivision (Exhibit 5) and construction of 424 single family homes (Exhibit 6 and 7), 84,313 square feet of commercial space in 8 commercial buildings, a 9.4 acre bluff park, and 58.3 acres of private open space and pedestrian and bicycle trails (see table below).

Following is a table identifying the proposed land uses followed by a detailed description of the proposed project (see also Appendix B for the applicants' description of their project):

Land Use	Non-Open Space	Open Space	Total

	(acres)	(acres)	(acres)
Lots and Private Drives (424 single family units)	95.7		
Manufactured Slopes (Identified as "OS-2" on Site Plan)		15.2	
Total Residential Area (including open space within development area)			**110.0**
Regional Commercial Area – 357,100 square feet of land (42.5 acres or 432,900 square feet are outside the coastal zone) (Excludes 1.05 acres of open space within OS-2 of which there is an overlap of 0.30 acres for commercial access bridge.	16.8	4.0	
Total Regional Commercial (Identified as "RC-1" on Site Plan)(including open space within development area)			**20.8**
Coastal Commercial – up to 60,000 square feet allowed according to the City's Specific Plan for the area (no actual buildings proposed)	1.0		
Total Coastal Commercial (Identified as "CRC-1" on Site Plan)			**1.0**
Public Park (includes 0.5 acres retained wetlands) (graded only – no facilities proposed)		9.4	
Total Public Open Space (Identified as "OS-1" on Site Plan)			**9.4**
Dudleya Reserve		1.3	
Dudleya buffer		0.8	
Central Canyon - Wetlands - Slopes Westerly Canyon - Wetlands - Slopes El Camino Real Bluff Face Perimeter Open Space - Manufactured Slopes (Excludes 0.1 acres portion of Lot A not within the coastal zone.)		 3.8 16.9 0.5 2.7 8.1 5.0	
Total Private Open Space (identified as "OS-2" on Site Plan)(includes trails)(excludes open space in residential and commercial)			**39.1**
Avenida Vista Hermosa Interchange and Entries (Assumes 0.57 acres less for AVH bridge included in the OS-2 acreage	8.4		
Total Avenida Vista Hermosa			**8.4**
Total All	**121.9**	**67.7**	**189.6**

1. Subdivision - Tentative Tract 8817

The applicant has indicated that the property is currently subdivided into 10 existing lots. Information submitted by the applicant indicates that a lot line adjustment related to these lots was processed at the local government level in 1998. Subdivisions, lot line adjustments, etc. within the coastal zone are considered development which requires a coastal development permit to be valid in the coastal zone. Commission staff have not identified any coastal development permits for subdivision(s), lot line adjustments, etc. for the subject site.

The applicant is proposing to subdivide the 250 acre site into 424 single-family residential lots (68.2 acres), 13 commercial lots (60.30 acres total/17.8 acres in the coastal zone), 37 open space lots (81.60 acres total/67.7 acres in coastal zone), 30 private street lots (26.90 acres), and one public street lot (13.55 acres total/9 acres in the coastal zone) (Exhibit 5). As noted above, only the portion of the development within the coastal zone requires a coastal development permit. Accordingly, only the portion of the subdivision on the 189.6 acres in the coastal zone requires a coastal development permit. The tentative tract map (8817) submitted by the applicant shows the location of the coastal zone boundary line. Based on this information, three of the thirteen commercial lots (Lot No.'s 438, 439, and 441 = 3.31 acres) and two of the thirty-seven open space lots (Lot No.'s KK and LL = 11.44 acres) are located entirely outside of the coastal zone. Meanwhile, eight of the thirteen commercial lots (Lot No.'s 440, 442 to 446, 448, 449 = 55.3 acres), one of the thirty-seven open space lots (Lot No. JJ = 9.0 acres), and the 9.37 acre lot for the proposed public street, Avenida Vista Hermosa, are bisected by the coastal zone boundary.

2. Grading and Site Preparation

The applicant is proposing to grade almost the entire property, with the exception of the wetlands areas and approximately 1,800 linear feet of bluff which were previously graded under Emergency Coastal Development Permit 5-90-274-G (Exhibits 9, 15, and 16). The applicant is requesting permanent authorization of the emergency grading under this permit application.

Emergency Coastal Development Permit 5-90-274-G authorized 310,000 cubic yards of grading in order to stabilize approximately 1,800 linear feet of the approximately 2,400 linear feet of 70 to 100 foot high bluffs which are on the Marblehead site and which face upon El Camino Real (Exhibit 15). The grading resulting in laying the bluff face back at a 1.5:1 to 2:1 slope (Exhibit 16). According to the Marblehead Coastal Bluffs Emergency Grading Program Focused EIR dated April 15, 1991, the actual emergency grading undertaken was 348,400 cubic yards of cut. This 348,000 cubic yards of cut was stockpiled in two locations (Exhibit 16): 1) between the western canyon and middle central canyon (a.k.a. Marblehead Canyon) on the Marblehead site; and 2) within the Marblehead Canyon on the site of the sewage treatment plant which was demolished in the early 1980's (see below for details). The 1991 EIR also states that a 30,000 cubic yard stabilization key involved the cutting and stockpiling of 30,000 cubic yards of material. According to a report by Leighton and Associates dated June 15, 2000, the stabilization key (essentially a ring of compacted soil) was constructed around the soil stockpiles to stabilize them since they were not placed as compacted engineered fill.

In addition to the Phase I grading which was already undertaken, the applicant is proposing 3,830,000 cubic yards of grading consisting of 2,100,000 cubic yards of cut and 1,730,000 cubic yards of fill and 370,000 cubic yards of material to be exported from the portion of the project site within the coastal zone (see Exhibit 9 for breakdown of grading quantities for individual areas on the project site). Approximately 30,000 cubic yards of material are anticipated to be

beach quality sand which will be used for beach nourishment in accordance with a separate coastal development permit.

In order to prepare the site for construction of the residential development, the applicant is proposing to use a type of retaining wall, a "loffelstein" wall, in order to stabilize slopes that will be steepened within the western canyon and Marblehead Canyon as part of the grading (Exhibit 11). Over 2,000 linear feet of walls will be constructed within Marblehead Canyon and over 1,700 linear feet of walls will be constructed in the western canyon. Within Marblehead Canyon, the walls will range in height between approximately 7 feet tall to approximately 52 feet tall with an average height of 30 feet. Within the western canyon, the walls will range in height between 15 feet and 41 feet with an average height of approximately 20 feet. In the western canyon some of the walls will be placed in two tiers to achieve a cumulative height of approximately 50 feet. The walls will be constructed in the bottom of the canyons with the toe of the wall between 5 feet and 35 feet from the existing wetlands which course through the canyon bottoms. As a result of site grading and use of the loffelstein walls, the canyons will be narrowed and the slope of the canyon walls will be steepened (Exhibit 10).

The proposed loffelstein walls will have a v-ditch drainage channel along the top of the wall which will be connected by subsurface pipes to discharge locations at the base of the wall. In addition, subdrains will be installed in the created slope which will also discharge at the base of the wall. The discharge pipes will be located at approximately 50 foot intervals along the base of the wall. Drainage will discharge from the pipes to the wetlands which are located 5 to 35 feet from the toe of the proposed loffelstein walls (Exhibit 11).

3. Residential Development

The applicant is proposing to construct 424 single family residences on 110 acres of land within the seaward most portion of the property within the coastal zone (Exhibits 3, 5, and 6). There are eight basic floor plans which range in square footage from 1,805 square feet to 2,400 square feet (Exhibit 7). The structures have a height range of 23 feet to 28 feet 6 inches. Each design has an attached garage with capacity for at least 2 vehicles. The residential lots range in size from 5,000 square feet to 15,344 square feet.

The proposed development includes all associated infrastructure including roads and utilities. The residential development is proposed to be a private, gated community. Gates would be placed at all entrances to the residential community including at Street CCC, at the northern and southern terminus of Street AAA and at Street FFF.

Three concrete box girder bridges are included in the road network for the residential development which cross the on-site canyons (Exhibit 13). One bridge, Street BBB Bridge crosses Marblehead Canyon. This bridge is approximately 80 feet long and 58 feet wide, with 27 feet of clearance between the bottom of the bridge span and the wetlands below. The two other bridges, Street AAA Bridge and Street RRR Bridge cross the western canyon. Street AAA Bridge is approximately 100 feet long and 38 feet wide with approximately 11 feet of clearance between the bottom of the bridge span and the wetlands below. Street RRR Bridge is approximately 70-75 feet long and 38 feet wide with approximately 27 feet of clearance between the bottom of the bridge span and the wetlands below. The bridges will be founded upon pilings and compacted fill retained by loffelstein retaining walls. The loffelstein walls will have v-ditch and subdrains similar to those described above. The toe of the walls will have minimum 5 foot setback from the wetlands.

4. Commercial Development

a. Marblehead Commercial Center:

The applicant is proposing the construction of eight commercial buildings (Building No.'s 12-19) within the coastal zone with a combined total of 84,313 square feet of space on 16.8 acres within a 59.3 acre commercial center of which 42.5 acres are outside of the coastal zone (Exhibits 5, 8a, 8b). Building heights will range from 36 to 46 feet tall. Following are the building sizes and proposed general uses of the development within the coastal zone:

Building No.	Size (ft^2)	Use
12	17,890	Restaurant
13	11,860	Restaurant
14	6,370	Restaurant
15	10,233	General Commercial
16	10,150	General Commercial
17	5,475	Restaurant
18	7,045	Restaurant
19	16,000	General Commercial

Based on a letter dated July 11, 2000, from the applicant's agent RBF Consulting, general commercial uses will include a video store, convenience store, optometry, real estate sales, optical/sun glass shop, one-hour photo, home furnishings store, art gallery, chiropractor, surf shop, interior design studio, shoe store, general gift store, card shop, nail salon, barber, beauty supply, tobacco shop, bicycle shop, picture frame store, and copy store. According to the applicant, visitor serving uses include restaurants, a movie complex and public viewing plaza areas located within the commercial center (both inside and outside the coastal zone). The proposed uses within the coastal zone are:

Use	Square Footage
Video Store	2,500
Convenience Food Store	2,723
Optometry	1,200
Real Estate Sales	1,000
1 Hour Photo	1,000
Home Furnishings Store	4,000
Art Gallery	2,000
Chiropractor	1,200
Surf Shop	1,300
Interior Design Studio	2,000
Shoe Store	3,000
General Gift Store	3,000
Card Shop	2,000
Nail Salon	900
Barber	1,000
Beauty Supply	1,000
Tobacco Shop	900
Bicycle Shop	1,200
Picture Frame Store	2,000
Copy Store	1,200

Restaurant Uses	46,690
Total	**84,313**

Associated infrastructure to serve the commercial development will be constructed including internal circulation roads, parking and utilities.

There are three proposed entrances to the commercial development located within the coastal zone (a fourth entrance is located outside the coastal zone) which are accessed off proposed Avenida Vista Hermosa. Within the commercial development two concrete box girder bridges are proposed to be constructed over the northern reach of Marblehead Canyon and the existing wetlands contained in the canyon bottom. One bridge provides an entry to the commercial development. This bridge is approximately 220-250 feet long and 80 feet wide with 55 feet of clearance between the bottom of the bridge span and the wetlands below. The second bridge is internal to the proposed development and is approximately 150 feet long and 38 feet wide with 56 feet of clearance between the bottom of the bridge span and the wetlands below. These bridges have the same foundation system with pilings and loffelstein walls proposed for the bridges in the residential development.

According to a letter dated December 10, 1999, submitted by RBF Consulting, there are 1,504 standard parking spaces located within the coastal zone. Fifty (50) of these parking spaces are designated for handicap parking.

The commercial development within the coastal zone buildings and infrastructure are part of a larger commercial shopping center, the remainder of which is being constructed outside the coastal zone. According to the Addendum to Final EIR, the overall commercial development, including the elements inside and outside the coastal zone, will have 700,140 square feet of commercial space in nineteen buildings, with 3,664 parking spaces (2,971 in surface lots and 693 in a two-tier parking garage).

b. Other Commercial

In addition to the proposed commercial development, the applicant is proposing to designate 1.0 acre of land for visitor serving commercial use near the corner of Avenida Pico and El Camino Real (Exhibit 3). This commercial area would be adjacent to a proposed Dudleya Native Plant Reserve and the public coastal park. This site will be graded only and will be reserved for visitor serving commercial uses.

In addition, the applicant is proposing the contribution of money to the City of San Clemente for the enhancement of the downtown business district (see Appendix B). According to the applicant, a significant portion of the business district where the money would be spent is in the Coastal Zone.

5. <u>Roads and Infrastructure</u>

The applicant is proposing the construction of roads and other infrastructure to serve the proposed development. Other infrastructure includes utilities to serve the proposed development such as water lines, reclaimed water lines, gas, electric, sewer, and storm drains with storm water management system.

In addition to the private road system and bridges noted above, the applicant is proposing the construction of one main arterial public roadway, Avenida Vista Hermosa (Exhibit 3). The proposed public road will extend from existing Avenida Pico to a new proposed freeway interchange at Interstate 5 (a portion of the road and the proposed interchange are outside the coastal zone). The road will provide access to the commercial and residential development.

Proposed Avenida Vista Hermosa will be a 4 lane, approximately 100 foot wide roadway with a center median. In order to construct the road, one concrete box girder bridge will be constructed over Marblehead Canyon (Exhibit 13). This bridge will be approximately 225 feet long and 109 feet wide with 55 feet of clearance between the bottom of the bridge span and the wetlands below.

The applicant is also proposing to widen 3,160 linear feet of El Camino Real in front of the project site. Along 2,450 linear feet of the 3,160 linear feet affected, the widening will increase the roadway from 45 to 50 feet wide. In addition, a 7 foot wide bike lane and 5 foot wide sidewalk will be added to this portion. Overall, El Camino Real will be widened by 17 feet. The remaining 710 linear feet will be widened a minimum of 5 feet and will include a bike lane and sidewalk. A retaining wall will be constructed along the Blochman's dudleya reserve in order to allow the widening to occur (Exhibit 12).

Avenida Pico will also be widened by 23 feet as a result of the project. The widening will affect 2,100 linear feet of Avenida Pico and will consist of increasing the width of the southbound lane from 20 feet to 28 feet, plus a 7 foot wide bike lane and an 8 foot wide sidewalk.

The applicant is also proposing the contribution of money to the City of San Clemente for off-site circulation improvements including construction of the Avenida Vista Hermosa freeway interchange and improvements to the Avenida Pico freeway interchange (see Appendix B).

The applicant is proposing to construct a storm water management system (Exhibit 14). According to the Marblehead Coastal Water Quality Plan dated July 7, 2000 prepared by RBF Consulting (herein referred to as the Water Quality Plan), the proposed storm water management system includes storm drain catch basins with catch basin inserts, storm water retention basins, underground storm water storage tanks and a valve and telemetry system to control the diversion of dry weather nuisance flows and first flush storm water to the sewage treatment plant for processing and discharge through the South East Regional Reclamation Authority (SERRA) ocean outfall. There are three proposed storm water detention basins located on the slopes of Marblehead Canyon. These detention basins store storm water from the residential development prior to either diversion to the sewage treatment plant for processing or discharge of the storm water through various existing culverts which pass under El Camino Real and discharge at the beach. In addition, there are four proposed underground water storage tank systems located under the proposed commercial development. The storage tanks consist of several interconnected 10 foot diameter cylinders. These storage tanks capture the first flush and dry weather nuisance flows from the proposed commercial development as well as run off from some developed areas located on the inland side of Interstate 5 which discharge onto the subject site. According to the Water Quality Plan the applicant is also proposing installation of two continuous deflection separation (CDS) units.

6. Open Space, Park, Trails, and Bikeways

The applicant is proposing open space areas, a bluff park, trails and bikeways as part of the proposed development (Exhibit 6). According to the applicant, a total of 67.7 acres of public

and private on-site open space are proposed. This figure cited by the applicant includes manufactured slopes within the residential development, vegetated setbacks and manufactured slopes in the commercial development, a public park, and privately maintained open space areas including a Dudleya habitat reserve and buffer, the central (Marblehead Canyon) and westerly canyons, the El Camino Real bluff face, and manufactured slopes along the perimeter of the development (see table above for land use break down).

Part of the 67.7 acre area is a 9.4 acre public bluff park. The bluff park will be located at the corner of Avenida Pico and El Camino Real adjacent to a Dudleya Native Plant Reserve and the 1.0 acre lot proposed to be reserved for visitor-serving commercial use. The applicant is not proposing any improvements to the 9.4 acre park other than grading of the site. However, the applicant is proposing to contribute money to the City of San Clemente for park improvements. According to the applicant's project description (Appendix B), the money would be used by the city for improvements to the bluff park as well as a proposed 7 acre sports park which is outside the coastal zone and north of the existing Shorecliffs Middle School. In addition, there is no on-site parking for the proposed park. However, the applicant indicates that approximately 60 diagonal parking spaces could be placed upon proposed Street BBB which provides access off Avenida Pico to the proposed park and the proposed residential development. The City of San Clemente has indicated a willingness to accept the park land (Exhibit 22)

Within the privately maintained 20.7 acre Marblehead Canyon open space area, the applicant is proposing approximately 1,900 lineal feet of 8 foot wide public trail. The proposed trail would be located on the westerly slope of Marblehead Canyon and would link the commercial center to the bluff park at the southern end of Marblehead Canyon.

In addition, the applicant is proposing approximately 2,300 lineal feet of trail approximately half way up the bluff face along El Camino Real. The bluff face would be maintained as private open space, however, the 2,300 foot long, 8 foot wide trail would be open to the public. The trail would be located along the top of the first bench created as part of the bluff stabilization project. The trail would be elevated and would include three vista points. The trail would extend from a sidewalk along El Camino Real near the proposed public park and then rejoin the sidewalk along El Camino Real near the existing Colony Cove development.

In addition to off-street public trails, the applicant is proposing pedestrian and bicycle trails and pathways in or adjacent to 8,500 lineal feet of Avenida Vista Hermosa, Avenida Pico and El Camino Real.

The applicant is also proposing the acquisition and public dedication of 1.1 acres of beachfront property which has 440 lineal feet of beach frontage (Exhibit 4). This property is located at the intersection of El Camino Real and Camino San Clemente and is across the street and approximately 800 feet upcoast from the subject site. The applicant is not proposing any improvements to the dedicated beachfront property. The 1.1 acre site is down coast of and contiguous with Poche Beach, a County owned public beach. The City of San Clemente has indicated some willingness to accept the land dedication (Exhibit 22)

Finally, the applicant is proposing contribution of money to the City of San Clemente for public improvements in the North Beach area (see Appendix B). However, no actual improvements are proposed under this application.

7. Habitat Impacts and Mitigation

The applicant is proposing to impact certain vegetation communities which are present on the project site as a result of grading and construction of the development. The "Biological Resources" and "Wetlands" sections of these findings detail the impacts to the various plant communities. In summary, the applicant is proposing the following impacts to plant communities/habitat areas in the coastal zone (Exhibit 17): 14.37 acres of 17.34 acres of coastal sage scrub (some of which is occupied by California gnatcatcher), 0.31 acres of 0.31 acres of needlegrass grasslands, 0.08 acres of 0.59 acres of alkali meadow wetlands in the coastal zone, 0.01 acres of 0.21 acres of seasonal wetlands in the coastal zone, and 3,600 individuals of Blochman's dudleya. In addition to these impacts which will occur under the development now proposed the applicant is proposing to make permanent the impacts to habitat that occurred under Emergency Coastal Development Permit G5-90-274. These impacts include 3 acres of coastal bluff scrub, 2.5 acres of needlegrass grassland, 0.1 acres of wetlands, and 3.5 acres of Blochman's dudleya (estimated 6,500 to 10,700 individuals).

In order to mitigate for the proposed impacts, the applicant is proposing to restore 16.49 acres of coastal sage scrub on the graded slopes of Marblehead Canyon and the western canyon. Some of this restored area, 2.41 acres, would be subject to fuel modification requirements for fire safety. In addition, the applicant is proposing to plant the loffelstein walls with coastal sage scrub which would result in an additional 3.27 acres of coastal sage scrub (Exhibit 18).

Impacts to the California gnatcatcher will be mitigated off-site (Exhibit 19). This mitigation includes the acquisition of development rights and establishment of a conservation easement over 50 acres of land containing 30 acres of existing coastal sage scrub and 12 pairs of California gnatcatchers. This mitigation would occur outside the coastal zone, several miles inland from the project site in the Las Flores area of Orange County. The site is located off Oso Parkway and is adjacent to the Tosoro High School and the proposed Foothill Transportation Corridor. This mitigation is being made available to the applicant by Rancho Mission Viejo, an entity that is selling the applicant mitigation credits.

In order to mitigate for impacts to needlegrass, the applicant is proposing to translocate 0.3 acres of needlegrass habitat. According to the applicants' mitigation plan contained in the document titled Preservation, Restoration and Management Plan for Wetlands, Sage Scrub and Other Upland Habitats dated July 7, 2000, the needlegrass would be translocated to Marblehead Canyon and the proposed Dudleya reserve.

According to Appendix A of the document titled Preservation, Restoration and Management Plan for Wetlands, Sage Scrub and Other Upland Habitats dated July 7, 2000, the applicant will be mitigating the impacts to 0.08 acres (3,623 square feet) of alkali meadow wetlands with the creation of 0.17 (7,246 square feet) of alkali meadow wetlands on-site. In addition, the 0.01 acres (612 square feet) of seasonal wetlands will be mitigated with 0.028 acres[1] (1,224 square feet) of seasonal wetlands on-site. The mitigation will occur in several mitigation sites located within the western canyon and Marblehead Canyon as identified on Exhibit 1 dated August 25, 2000 in the document titled Preservation, Restoration and Management Plan for Wetlands, Sage Scrub and Other Upland Habitats dated July 7, 2000 (Exhibit 18).

The proposed project will also result in impacts to 0.84 acres of ephemeral drainages on the project site. These impacts will be mitigated by the application through the creation of 0.9 acres

[1] Note: Exhibit 18 indicates that no seasonal wetland mitigation is proposed. However, the applicants Preservation, Restoration, and Management Plan indicates that mitigation is proposed. Therefore, apparently, there is an error on Exhibit 18.

of wetlands within the proposed storm water detention basins. According to the applicant, these ephemeral drainages are not considered wetlands under the Coastal Act.

In order to mitigate for impacts to the Blochman's dudleya, the applicant is proposing to complete the translocation plan being implemented under Coastal Development Permit 5-97-136. The translocation plan establishes a 2.1 acre reserve for the dudleya on-site near the corner of Avenida Pico and El Camino Real. The applicant is not proposing any additional mitigation for the dudleya.

Finally, the applicant is proposing to contribute $100,000 to the property owner's association for long-term on-site habitat management. Off-site mitigation areas would be managed by a separate $106,000 endowment established by the assessment of a onetime fee of $250 per dwelling unit.

8. Development Agreement and Specific Plan

The applicant has entered into a development agreement with the City of San Clemente. Where there is no certified local coastal program, such as at the project site, development agreements require a Coastal Commission approval to be effective in the coastal zone. The applicant has not requested the Commission's approval of the development agreement as part of this application.

In addition, a general plan amendment and specific plan was processed for the project at the local level. These documents were submitted as supporting documents by the applicant in their application for the subject coastal development permit. However, the City has not submitted the general plan or specific plan to the Commission for any certification. As will be noted below, there is no certified land use plan or local coastal program for the Marblehead site.

B. PROJECT SITE HISTORY

Prior to the 1880's the bluffs at Marblehead were subject to wave attack. However, with the construction of the railroad in the 1880's and El Camino Real in 1929, the bluffs were isolated from wave attack. The construction of the Capistrano Shores mobile home park (prior to the Coastal Act) seaward of El Camino Real and the railroad placed another line of development between the bluffs at the site and the Pacific Ocean.

In 1980, the California Coastal Commission granted Coastal Development Permit A-80-7433 to Marblehead D. Lusk & Son General Partner for the demolition of an abandoned sewage treatment plant on an 18.5 acre parcel within the Marblehead site. The permit was granted without special conditions.

In 1981, the City of San Clemente submitted a land use plan (LUP) for certification to the Commission which included the Marblehead site (then known as Reeves Ranch). The Commission certified the LUP with modifications, including a modification which removed the Marblehead site from the LUP certification. The Commission cited the lack of cohesive plans for development of the site and a lack of appropriate policies to address coastal resource issues at the site in their denial of certification of the LUP for this area. The certified LUP was not adopted by the City, and the certification lapsed after six months. Subsequent LUPs have been submitted and approved by the Commission, however, each of these submittals did not include the Marblehead site. Therefore, there is no certified LUP for the Marblehead site.

In 1987 the City of San Clemente processed an environmental impact report for the Marblehead site which included 27 acres of tourist commercial (TC), 16.3 acres of park, 36.5 acres of residential (250 units), 5.9 acres of very low density residential, and a small parcel of general commercial. The tourist commercial designation was intended for the Nixon Library site. Staff submitted a letter in response to the Nixon Library Draft Environmental Impact Report, however, the project never progressed beyond the EIR stage and an application was not submitted for a CDP. In this letter staff expressed concerns regarding coastal canyon setbacks, filling of coastal canyons which were designated as ESHAs, the filling of wetland habitat in coastal canyons, coastal bluff and landform alteration and protection of the Blochman's dudleya on the coastal bluffs.

On February 20, 1990, the Executive Director issued Emergency Coastal Development Permit G5-90-122 to the City of San Clemente for the removal of those portions of the bluff face which were posing an immediate hazard to life and property to those using Pacific Coast Highway

(a.k.a. El Camino Real). The approved emergency work also included the preparation of pads at the top of the bluff to place equipment for additional bluff hazard remediation. In addition, on April 4, 1990, the Executive Director issued Emergency Coastal Development Permit G5-90-274 for the first phase of three phases of bluff stabilization. The Lusk Company together with the City of San Clemente asserted that the ongoing bluff failures of the Marblehead coastal bluffs represented a safety hazard to vehicular traffic and pedestrians along Pacific Coast Highway (a.k.a. El Camino Real). The position of the Lusk Company and the City of San Clemente as to the public safety hazard was supported by the Commission geologist, Richard McCarthy, and an emergency permit was issued by the Executive Director.

Phase I grading approved by Emergency Coastal Development Permit G5-90-274 was for approximately 310,000 cubic yards of grading to lay the bluffs back to a 1.5:1 or 2:1 gradient. Approximately 2,500 linear feet of the coastal bluffs were laid back as a result of this emergency grading in 1990. In the process, it is estimated approximately 5,000 Blochman's dudleya were salvaged and taken to the Tree of Life Nursery. Other estimates state that 3,700 plants were salvaged, while 2,900 plants were destroyed, out of a total population of approximately 10,000-12,000 plants. An estimated 4,200 plants remained on site in the Phase II (3,600) and Phase III (600) areas.

The grading was completed for Phase I but not for Phases II and III. Meanwhile, the applicants' submitted a follow-up coastal development permit application (5-90-274) which was eventually withdrawn by the applicant due to financial issues. Subsequently, another follow-up application was submitted (5-94-263) in 1994. However, prior to Commission action on the application, the applicant withdrew this application as well.

In 1995, the Commission granted Coastal Development Permit 5-94-256 and Coastal Development Permit Amendment 5-94-256-A to the City of San Clemente for a slope stabilization project along the bluffs at Colony Cove, which is immediately northwest of the Marblehead project site. In addition, the Executive Director issued Emergency Coastal Development Permit G5-94-256. The slope stabilization project involved the cut of 58,000 cubic yards of soil and 3,000 cubic yards of fill along the bluff and installation of retaining structures. In addition to stabilizing the bluffs at Colony Cove, the stabilization project extended onto the Marblehead project site. Approximately 400 linear feet of bluffs on Marblehead site were graded under 5-94-256, 5-94-256A, and G5-94-256. According to a document in the Commission's files for permit 5-94-256, the City intended to stockpile the soils cut as a result of the stabilization project on the Marblehead site between Marblehead Canyon and the western canyon. According to Exhibit 3 of the Marblehead Coastal Resource Management Plan dated October 1997, the cut material was stockpiled in the planned location. However, 5-94-256, 5-94-256A, and G5-94-256 did not authorize the stockpile of any soils on the Marblehead site and Commission staff have not been able to locate any coastal development permit approving this stockpile.

On November 5, 1997, the Commission granted Coastal Development Permit 5-97-136 to Marblehead Coastal, Inc. for the implementation of a Blochman's dudleya translocation plan. The plan includes the collection of on-site Blochman's Dudleya seed, cultivation of seed, revegetation with associated native plants, installation of a six foot high chain link fence around a 1.34 acre translocation site, relocation of Dudleya plants to the 1.34 acre site and establishment of a 50 foot buffer area around the 1.34 acre site. The approval was granted with special conditions requiring implementation of the plan, a requirement for submittal of monitoring reports and failure contingency plan, restrictions on the use of the 1.34 acre site with associated deed restrictions.

C. LANDFORM ALTERATIONS AND SCENIC RESOURCES

1. Landform Alterations

Section 30251 of the Coastal Act states in relevant part:

> *Permitted development shall be sited and designed to… minimize the alteration of natural land forms…*

The proposed project will result in the grading of almost the entire project site. Large areas of cut and fill are proposed to create terraces for the construction of homes (such grading would maximize the number of ocean view lots within the development) and the commercial development. In addition, large cut and fill areas are proposed within canyons on the project site in order to maximize the amount of development area for residences. These cuts and fills will result in the filling of at least one smaller canyon, the narrowing of the remaining two canyons, and the steepening of the walls of those remaining canyons. In addition to visual impacts, the landform alterations will require grading that has impacts upon biological resources within the canyons, impacts upon wetland buffer areas, and potential adverse changes to wetlands hydrology and water quality. These impacts resulting from the proposed landform alteration are discussed more fully elsewhere in these findings in the "Biological Resources" and "Wetlands" sections.

Exhibit 9 provides a summary of grading for the proposed development. Coupled with Leighton and Associates analysis titled Estimated remedial quantities pertaining to the grading of Marblehead Coastal Property, tentative tract 8817, City of San Clemente, California dated September 14, 2000, this provides an overview of the magnitude of the grading proposed. It appears that the remedial grading described in the Leighton and Associates analysis, which amounts to an estimated 1,470,050 cubic yards (1,119,500 cubic yards within the Coastal Zone), is in addition to the grading reported on Exhibit 9, which amounts to 5,286,000 cubic yards (3,830,000 cubic yards within the coastal zone). Accordingly, the total grading proposed would be 6.76 million cubic yards, of which 4.95 million cubic yards are within the coastal zone.

According to the Leighton and Associates analysis, it appears that remedial grading is solely for the purpose of overcompaction due to the highly compressible nature of the soils found on the site and for the construction of stabilization buttresses. That is, this material would be removed, recompacted, and replaced. The Coastal Commission has generally included such grading in figures for total grading involved in a project because although remedial grading may not have permanent landscape alteration impacts, the temporary disturbance involved potentially does have significant biological resource, traffic, water, and air quality impacts. The grading figures noted above may, in fact, underestimate the total grading that would be necessary to carry out the proposed development in light of the fact that Exhibit 9 contains no estimates of grading necessary for the remediation of landslides and other slope failures and for removal and recompaction of alluvial soils, artificial fills, and debris.

The proposed project calls for the construction of large pads designed to accommodate 20-30 housing units and entire cul-de-sacs. The grading plan results in the filling of at least one entire small canyon (Tributary D) as well as the narrowing of both the western canyon and Marblehead Canyon. At the western canyon, the canyon will be narrowed and the overall slope of the canyon walls steepened through the construction of reinforced earthen slopes (a.k.a. loffelstein walls). In Marblehead Canyon, the main branch of the canyon will also be narrowed and the

walls steepened through the use of loffelstein walls and grading to form 2:1 slopes. In addition, approximately 1,100 linear feet of the eastern branch of Marblehead Canyon will be filled. These alterations are proposed in order to accommodate the construction of single family residences and associated infrastructure.

The proposed fill of one canyon and the grading, construction of walls and other infrastructure within the western and Marblehead canyons would change the landform from gently to steeply sloping natural grades to a steeply sloping manufactured appearance. This proposed development would degrade the natural landform appearance of the canyons.

There are alternatives to the grading and filling of canyons on the project site. For instance, if development was confined to the approximately 112 acres of gently sloping marine terraces which occur over large areas of the project site, and building pads were constructed only to accommodate individual building footprints, then far less landform alteration would occur. In this way, the character of the existing canyons could be maintained.

The Commission finds that the proposed project does not minimize landform alteration. There is ample space on the project site where development could be accommodated without the substantial alteration of existing canyons. Therefore, the Commission finds that the proposed project is inconsistent with Section 30251 of the Coastal Act. Therefore, the proposed project must be denied.

2. Scenic Resources

Section 30251 of the Coastal Act states in relevant part:

> *The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas…*

The project site is visible to the public from the Interstate 5 freeway. Presently, there are views of the coast across the site and through the existing canyons. These are some of the last views the public travelling north along this major highway have of the coastline for several hundred miles. Furthermore, these views are some of the only views the public has of the coastline from the highway in San Clemente. The proposed project will narrow Marblehead Canyon, which is the landform which makes these views possible. The narrowing of the canyon would interfere with these existing views.

In addition, the canyons on the project site have aesthetic qualities that are increasingly unique in San Clemente and Orange County. Elsewhere in San Clemente, the coastal canyons have been developed with residential and other urban development. In many cases, houses are perched at the top of the canyon slopes or within the canyons themselves. In addition, ornamental landscaping and associated appurtenant structures are found on the slopes and within the canyons. The visual quality of these other canyons has been substantially degraded over time. However, with the exception of the mouths of the canyons which were graded in the early 1990's, the landform of the canyons at the project site are relatively undisturbed. The slopes of the canyons are covered by a mixture of coastal sage scrub, grassland, and open canopy woodlands. The canyon bottoms contain alkali and freshwater wetlands. Birds and other wildlife are found within these canyons. The proposed landform alteration would narrow and steepen the sides of the canyons. These landform alterations would also change the

appearance of the existing biological landscape from a natural one to a manufactured appearance. Furthermore, the quantity and diversity of wildlife will also decrease. Each of these elements decreases the overall natural quality to the canyons and their aesthetic appeal.

As noted above, there are alternatives which would avoid the large scale landform alteration proposed. The Commission finds that the proposed project does not protect the scenic and visual qualities of the site. This failure to minimize landform alteration results in adverse impacts to scenic canyons and coastal views. There is ample space on the project site where development could be accommodated without the substantial alteration of existing canyons. Therefore, the Commission finds that the proposed project is inconsistent with Section 30251 of the Coastal Act. Therefore, the proposed project must be denied.

D. WETLANDS

There are 4.95 acres of wetlands in the project area consisting of alkali marsh, alkali meadow, seasonal wetland, and mulefat scrub. These wetland areas are not subject to tidal inundation.

One of the main reasons for preserving, expanding, and enhancing Southern California's remaining wetlands is because of their important ecological function. First and foremost, wetlands provide critical habitat, nesting sites, and foraging areas for threatened or endangered species. Wetlands also serve as migratory resting spots on the Pacific Flyway a north-south flight corridor extending from Canada to Mexico used by migratory bird species. In addition, wetlands serve as natural filtering mechanisms to help remove pollutants from storm runoff before the runoff enters into streams and rivers leading to the ocean. Further, wetlands serve as natural flood retention areas.

Another critical reason for preserving, expanding, and enhancing Southern California's remaining wetlands is because of their scarcity. As much as 75% of coastal wetlands in southern California have been lost, and, statewide up to 91% of coastal wetlands have been lost.

1. Wetlands Fill

Section 30108.2 of the Coastal Act states:

> *"Fill" means earth or any other substance or material, including pilings placed for the purposes of erecting structures thereon, placed in a submerged area.*

Section 30121 of the Coastal Act states:

> *"Wetland" means lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens.*

Section 30233(a) of the Coastal Act states, in relevant part:

> *(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:*

(1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.

(2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.

(3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.

(4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.

(5) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

(6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.

(7) Restoration purposes.

(8) Nature study, aquaculture, or similar resource dependent activities.

The proposed project will result in direct impacts to 0.08 acres (3,623 square feet) of 0.59 acres (25,700 square feet) of alkali meadow wetlands in the coastal zone and 0.01 acres (612 square feet) of 0.21 acres (9,148 square feet) of seasonal wetlands in the coastal zone. In addition to these impacts which will occur under the development now proposed the applicant is proposing to make permanent the impacts to sensitive habitat that occurred under Emergency Coastal Development Permit G5-90-274. These impacts include 0.1 acres (4,356 square feet) of wetlands.

The impacts occurring under the proposed development have been identified as “Impact Areas” A, B1, B2, and C. Impact Area A occurs at Tributary A along the bluffs overlooking El Camino Real at the northwest corner of the site. In this location, an existing 1,871 square foot alkali meadow wetlands will be eliminated as a result of grading for site preparation for the construction of single family homes including bluff stabilization necessary to stabilize the area for construction of homes.

Impact Area B1 results in the elimination of 362 square feet of alkali meadow at the base of the bluffs along the boundary of the Blochman’s dudleya reserve. Impact Area B2 occurs in this same area and results in impacts to 1,390 square feet of alkali meadow. These impacts result from the proposed widening of El Camino Real.

Impact Area C occurs at the northeast boundary of the proposed bluff park area and eliminates a 612 square foot seasonal wetland. This impact is caused by the grading and construction of proposed Street BBB.

The applicant is proposing to mitigate the impacts to 0.08 acres of alkali meadow wetlands with the creation of 0.17 (7,246 square feet) of alkali meadow wetlands on-site. In addition, the 0.01 acres of seasonal wetlands would be mitigated with 0.028 acres (1,224 square feet) of seasonal wetlands on-site. The mitigation would occur in several mitigation sites located within the western canyon and Marblehead Canyon.

The proposed project will also result in impacts to 0.84 acres of ephemeral drainages on the project site. These impacts are proposed to be mitigated by the applicant through the creation of 0.9 acres of wetlands within the proposed storm water detention basins. According to the applicant, these ephemeral drainages are not considered wetlands under the Coastal Act.

Grading for the proposed project will cause the fill of wetlands as defined in Section 30108.2 of the Coastal Act. The purpose of the fill is for the construction of single family residences and the facilities to serve that development including bluff stabilization and the construction of roads. Section 30233 of the Coastal Act governs the fill of wetlands and establishes eight enumerated uses for which fill is allowable. Fill for the construction of single family residences in not one of the allowable uses enumerated.

However, it could be argued that the fill at each of the impact areas results from an incidental public service. For instance, the impact at Impact Area A is occurring in part due to a bluff stabilization project. The applicant has argued that the bluff stabilization is necessary to prevent the closure of El Camino Real. The impact at Impact Areas B1 and B2 result from the widening of El Camino Real. Finally, the impact at Impact Area C results from the construction of Street BBB, which is proposed to be a public road. The construction and widening of roads in order to increase traffic capacity, however, do not constitute incidental public services. See Bolsa Chica, 83 Cal.Rptr.2d at 863-864.

Even if the Commission were to come to the conclusion that each of the wetland fills is occurring to provide an incidental public service, the Commission would still need to make a finding that the proposed fill is the least environmentally damaging feasible alternative. The applicant has submitted alternatives analyses which demonstrate that the proposed project is not the least environmentally damaging feasible alternative.

For instance, at Impact Area A, one alternative is to install a retaining wall on the seaward side of the existing wetlands and avoid grading within the wetlands (Exhibit 23). Use of this alternative would avoid direct impacts at Impact Area A. An analysis by Leighton and Associates dated September 18, 2000, concludes that this retaining wall is geotechnically feasible. In addition, a letter dated September 20, 2000, from Glenn Lukos Associates determines that the avoidance would be feasible from a biological standpoint.

According to Attachment 22 of the applicants' submittal dated July 11, 2000, the wetlands impacts from the proposed El Camino Real widening can be avoided at Impact Areas B1 and B2 (Exhibit 24). The alternatives analysis shows that by widening El Camino on the opposite side of the street, the street widening will have no impact at proposed Impact Areas B1 and B2.

Finally, according to alternatives analyses submitted by the applicant, the wetlands at Impact Area C could also be avoided (Exhibit 25). In this case, there are at least 3 alternatives

including not building Street BBB and either realigning Street BBB south or north of the existing wetlands. According to a geologic analysis prepared by Leighton and Associates dated September 18, 2000, and a biological analysis prepared by Glenn Lukos Associates, these alternatives are feasible and would avoid direct impacts upon wetlands.

Therefore, since it has been demonstrated that it is feasible to avoid the impacts to wetlands at Impact Areas A, B1, B2, and C, the Commission finds that the project, as proposed, is not consistent with Section 30233 of the Coastal Act and must be denied.

2. Wetlands Ecology

Section 30230 of the Coastal Act states that:

> *Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

Section 30231 of the Coastal Act states that:

> *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

Section 30240 of the Coastal Act states that:

> *(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.*
>
> *(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

a. Wetland Buffers

The Marblehead project site consists of a bluff and bluff top mesa incised by several canyons. A majority of the wetlands are located within the canyon bottoms. However, there are a few wetlands along the bluff top as well.

The proposed project involves mass grading of the subject site and the construction of a system of loffelstein walls in order to prepare the site for the residential and commercial development. While the project will avoid planned direct impacts upon 4.86 acres out of 4.95 acres of wetlands within the coastal zone, the proposed project will result in grading immediately adjacent to the wetlands which will be retained. The canyon walls adjacent to the wetlands will be graded to create 2:1 slopes in some areas. In addition, loffelstein walls will be constructed immediately adjacent to the wetlands. According to the applicants' submittal, the toe of the loffelstein walls will have a minimum 5 foot setback from the wetlands and up to a 30 foot setback from the wetlands.

Buffer areas are undeveloped lands surrounding wetlands. Buffer areas serve to protect wetlands from the direct effects of nearby disturbance. In addition, buffer areas can provide necessary habitat for organisms that spend only a portion of their life in the wetland such as amphibians, reptiles, birds, and mammals. Buffer areas provide obstructions which help minimize the entry of domestic animals and humans to wetlands. Buffers also provide visual screening between wetland species that are sensitive to human impacts, such as lighting. Buffers can also reduce noise disturbances to wetland species from human development. The Commission has commonly found that that a minimum 100 foot buffer needs to be established around wetlands in order to protect those wetlands from disturbance.

The Commission's biologist, Dr. John Dixon, has reviewed the biological information submitted by the applicant and has determined that a minimum 100 foot buffer would be appropriate for the wetlands at the project site. This 100 foot buffer must contain no development and experience

no disturbance as a result of adjacent development. Accordingly, no grading or construction of loffelstein walls may occur within the buffer area.

The applicant identifies a wetland buffer which varies in width and includes within it the re-graded canyon walls, the loffelstein walls, the storm water detention basins, storm drain outlets, subdrain outlets, the 8 foot wide public trail (in Marblehead Canyon), restored coastal sage scrub, and a 30 foot wide fuel modification zone. Essentially, the buffer identified by the applicant includes all the land between the edge of the wetland and the private streets and residential lots which are proposed. Within Marblehead Canyon this wetland "buffer" ranges between 30 to 100 feet wide. In the western canyon the area is between 10 and 50 feet. This buffer zone identified by the applicant does not provide the development-free setback commonly required by the Commission and recommended by the Commission's biologist. These proposed buffers are inadequate because 1) construction of the structures themselves will require grading that will cause sedimentation impacts on the wetlands, that will eliminate the upland habitat upon which certain wetlands associated wildlife species need to survive, and that will eliminate the existing wildlife within the habitat; 2) the buffers contain pedestrian and bicycle trails and storm water detention basins (which require maintenance) that will introduce an increased level of human disturbance to the wetland areas; and 3) the steepened canyon slopes will not provide the same type of habitat as exists presently, reducing or eliminating the potential for recolonization of the area after disturbance.

As noted above, there are wetlands located outside of the canyons. The applicant is proposing to retain one of these wetlands, a 1,251 square foot (0.03 acre) mulefat scrub wetland identified by the applicant as "Tributary B" (Exhibits 17 and 18). This wetland is located at the top of the bluff at the southwest corner of the property. In this case, the applicant is proposing to create a 0.09 acre, roughly rectangular lot for the wetland to reside. Residential lots will flank both sides of the wetland, and proposed Street TTT will be built on the inland side of the wetland. The proposed graded bluffs will be on the seaward side of the wetland. As configured, there would be an approximately 10 foot wide buffer around the wetland. The Commission's biologist has recommended a minimum 100 foot wide buffer.

Section 30231 of the Coastal Act requires that the biological productivity and quality of coastal waters be maintained through, among other means, the maintenance of a protective natural buffer area. Section 30240(b) of the Coastal Act requires that development in areas adjacent to environmentally sensitive habitat areas, such as wetlands, must be sited and designed to prevent impacts which would significantly degrade those areas. Development, including grading and the construction of loffelstein walls, would occur within the proposed buffer area. This grading and construction will result in a high degree of disturbance to areas surrounding the wetlands. Such grading and construction would cause siltation of the wetlands and elimination of the habitat for wetlands associated organisms such as amphibians, reptiles, birds, and mammals, which rely upon upland areas for survival. In addition, the grading and construction would eliminate the organisms themselves. Also, for those organisms that have a high degree of mobility, there will be no nearby habitat areas to which the organisms can escape and temporarily reside during construction. The buffer area proposed by the applicant is not adequate to provide the protection required by Sections 30231 and 30240(b) of the Coastal Act. Therefore, the project, as proposed, cannot be found consistent with Sections 30231 and 30240(b) of the Coastal Act.

b. Shading Impacts

The proposed project involves the construction of six bridges which span the existing and proposed wetlands on the project site. These bridges are identified as Street AAA Bridge, Street BBB Bridge, Street RRR Bridge, Avenida Vista Hermosa Bridge, Commercial Entry Bridge, and Internal Commercial Bridge. The bridges range in width and length between 38 feet to 109 feet wide and 80 feet to 250 feet long. Clearance between the bridge and the wetlands below ranges from 11 feet at the Street AAA Bridge to 56 feet at the Internal Commercial Bridge.

The proposed bridges will cast shadows upon the wetlands below them. This shading can have impacts upon the vegetation communities that are a part of the wetlands. The applicant has submitted an analysis of shading impacts prepared by Glenn Lukos Associates titled Shading Study Associated with Proposed Bridges Spanning Existing Wetlands on Marblehead Coastal, San Clemente, California dated August 22, 2000.

According to this shading analysis, impacts to the wetlands from shading caused by the bridges will not be measurable at the Avenida Vista Hermosa Bridge, Commercial Entry Bridge, the Internal Commercial Bridge, and the Street RRR Bridge. Therefore, the applicants' biologist has concluded that impacts would not be significant

However, at the Street BBB Bridge, a total of 523 square feet (0.012 acres) of alkali marsh would be affected by shading. This bridge crosses Marblehead Canyon in the vicinity of the proposed bluff park. At this location shading is expected to have a measurable impact upon the growth of wetland vegetation due to the orientation of the bridge, the width of the bridge and the presence of steep sided canyons. However, the shading study indicates that the impact would be insignificant with respect to the hydrological and biogeochemical function of the wetlands.

Shading is also expected to impact 784 square feet (0.018 acres) of alkali marsh under proposed Street AAA Bridge. This bridge crosses the western canyon. However, similar to the Street BBB Bridge, the shading analysis states that wildlife usage is not expected to be affected by the shading impacts, nor are the hydrological and biogeochemical functions of the wetland expected to be impacted.

c. Wetlands Hydrology and Water Quality

The applicants' submittal contains various documents which describe the hydrology of the wetlands on the project site and the impacts the proposed development would have upon wetlands hydrology. The Preservation, Restoration, and Management Plan for Wetlands, Sage Scrub, and other Uplands Habitats dated July 7, 2000 (herein 'Preservation, Restoration, and Management Plan'), summarizes the applicants' analysis of wetlands hydrology and impacts. The applicant has also submitted additional supporting documentation regarding wetlands hydrology and impacts including Leighton and Associates analysis titled Assessment of pre and post development groundwater conditions utilizing site-specific data, Marblehead coastal project, City of San Clemente, California dated 22 August 2000 and Glenn Lukos and Associates analysis titled Hydrological requirements of Alkali Marsh and Alkali Meadow Vegetation on Marblehead Site, San Clemente, California dated 22 August 2000 (see also Appendix A of this staff report).

The Preservation, Restoration, and Management Plan states that wetlands on the project site presently receive hydrologic input primarily from groundwater and, to a lesser extent, from urban runoff and rainfall. The proposed project will eliminate off-site urban runoff and introduce on-site

urban runoff and runoff from irrigation of future canyon slopes and loffelstein walls constructed next to the wetlands.

Off-site urban runoff enters the wetlands on the project site through four storm drains which originate from the north side of Interstate 5 and cross under the highway. The proposed project would divert this runoff into the storm drain and water quality management system. Therefore, this runoff would no longer provide hydrological input to the wetlands. The Preservation, Restoration, and Management Plan states that the direction of this runoff away from the wetlands would have no adverse impact upon the wetlands because the wetlands do not substantially rely upon this water source.

Regarding rainfall, the Preservation, Restoration, and Management Plan states "*Under existing conditions, rainfall provides a periodic surface water supply source for the canyon wetlands. The proposed project would reduce the surface water tributary area to the preserved central and western canyon bottoms. However, because the wetlands rely on water during rainfall and surface water during the brief runoff period and groundwater as the primary sources, the reduction in size of the tributary surface water area would not adversely affect the wetlands. Rainfall would continue to provide a water source during a storm, and for a brief time after each storm event.*" Therefore, according to the applicant, while the hydrologic input to the wetlands from rainfall will decrease, the reduction will not adversely affect the wetlands because the wetlands only rely upon such inputs during rainfall and the brief period of runoff after the rainfall. Groundwater is the primary source for the wetlands and is the water source upon which the wetlands are substantially reliant. This information regarding groundwater as the primary source of water for the wetlands is also more fully described in Hydrological requirements of Alkali Marsh and Alkali Meadow Vegetation on Marblehead Site, San Clemente, California by Glenn Lukos Associates dated 22 August 2000.

Regarding groundwater as a source of water for the wetlands, the Preservation, Restoration, and Management Plan states "*Groundwater is the major source of water for the wetlands in the canyon bottoms (see Appendix A, Section II.A, Type of Habitat to be created/Enhanced, Paragraph 1). Ground water is currently in evidence at seeps near the canyon bottom and in the canyon bottoms. Ground water that enters the site from under the freeway and under future fill proposed within the canyons would be collected in canyon subdrains placed during construction and reintroduced into the canyon at outlets in the wetland setback.*"

The Preservation, Restoration, and Management Plan goes on to state: "*Groundwater that currently reaches the canyon bottom from adjacent on-site areas would continue to reach the canyon under developed conditions. In fill areas outside the canyons and in buttressed slopes adjacent to the canyons, subdrains would collect ground water and direct it to the canyon to assure an ongoing supply of water to the wetlands. In cut areas, no change in ground water permeability is anticipated. Loffelstein walls proposed for some slopes are permeable to ground water but also require subdrains to carry ground water under, and from behind backfill and the wall facing which will also be directed to the wetlands (see Appendix E, Water Quality Plan, and Exhibit 4).*

Furthermore, the Preservation, Restoration, and Management Plan states: "*There will be an increase in impervious area but a significant increase in application rates due to irrigation will occur. Groundwater volume and quality is expected to be similar to the existing condition (see Anticipated Groundwater Conditions, Leighton & Associates, Appendix D)*."

Regarding landscape irrigation water, the Preservation, Restoration, and Management Plan states: "*A limited amount of landscape irrigation water from the canyon hillsides and future Loffelstein slopes immediately adjacent to the canyon may reach the canyon bottom. Most project irrigation water will be absorbed by vegetation, or will percolate into the ground. Excess irrigation water is anticipated to be minimal due to the low water requirements of the native and drought tolerant landscaping that will be used within the canyon areas, and the use of efficient irrigation. In addition, irrigation systems will only be temporarily operated until native vegetation is established.*"

With the exception of the area occupied by the wetlands and a 5 to 30 foot wide buffer around those wetlands, the proposed project will result in the grading of the entire project site and the construction of buttress fills, retaining walls, roads, houses, commercial buildings, parking lots, among other development on the relatively flat upland areas and within the canyons themselves. This development will transform the site from a relatively vacant state to a predominantly urban environment. As noted above, the wetlands on the project site are substantially reliant upon groundwater. The grading and construction of structures could cause substantial changes to the hydrological mechanisms which currently provide water to the wetlands. The applicants' analyses of these changes and the scientific validity and reliability of these analyses is of utmost importance in determining whether the project is consistent with Coastal Act policies regarding the protection of biological resources including wetlands. Based on the Commission's review of these materials, the Commission cannot conclude that the wetlands will not be adversely impacted by the proposed project.

The applicants' report titled Assessment of Pre and Post Development Groundwater Conditions Utilizing Site-Specific Data by Leighton and Associates dated August 22, 2000, purports to provide an analysis of the post-development effects on groundwater conditions, using site-specific data to form assumptions. However, the concluding paragraph notes that making predictions regarding changes to amount and flow of groundwater to the canyon as a result of the proposed development is difficult because of the many variables. The report goes on to state that "basic" assumptions for the site have been made regarding annual rainfall, landscape irrigation, and groundwater paths. Based on the assumptions, the consultant concludes that "groundwater will continue to flow into the central and western canyons, experiencing a probable increase over the existing condition". These assumptions are generalizations and are not specific to the project site. Furthermore, the assessment does not consider other site specific conditions which may have a considerable effect on the outcome of the analysis. For instance, normal losses and those which could be artificially induced based on important factors associated with existing site hydrology and post-development conditions pertinent to groundwater recharge, such as soil infiltration capacity and rates, annual recharge rates, the effect of consistent application of water through irrigation as opposed to the present seasonal contribution via rainfall, and on soil moisture retention and infiltrative capacity, are not reported in the Leighton and Associates *Assessment*.

The expected changes to the hydrologic regime at the proposed development site are also addressed in the Leighton and Associates Assessment. The analysis concludes that current contributions to groundwater amount to 292.3 acre-feet/year, and that post-development conditions will result in ground water recharge amounting to 315.5-400.5 acre-feet/year, suggesting that net impacts in terms of total ground water recharge will be limited to a possible slight elevation of the water table. Further it concludes that surface water contributions to the wetlands in the area are "relatively small."

This analysis is flawed in several regards. First, the analysis assumes that there is no runoff at

the site. It assumes that 100% of the 14 inches of rainfall on the 250.6 acres of the site infiltrates and serves to recharge groundwater under current conditions, and would continue to do so in permeable areas after the development. No infilitration data that would support this unusual condition are provided. Such a condition is highly unlikely given the clay-rich soils developed on the Capistrano formation, which is exposed over portions of the site. The terrace deposits overlying the Capistrano formation over much of the site, although relatively permeable, still will likely not have the infiltration capacity to absorb all of the water of typical storm events. In fact, the assumption that there is no runoff at the site is in stark contrast to the stormwater management reports[2] [3] [4] [5] [6], which show peak 24-hour discharges leaving the site of from 18.6 acre-feet (24-hour volume for a 2 year storm) to 68.2 acre-feet (24-hour runoff volume for 100-year storm).

Second, the statement that surface water contributions to the wetlands are "relatively minor" is unsupported. No data are given concerning the annual volume of runoff crossing under Interstate 5 and entering the canyons on site. Since the proposed development would prevent all such surface water from entering the wetlands, analysis of its potential impact is necessary, and is not possible without such data. This issue may be significant, especially given comments made in a letter to the Commission from Fred Roberts, Jr. dated February 29, 2000, who states that the alkali wetlands at the project site may be substantially reliant upon hydrological inputs produced on the portion of the property outside the coastal zone (Exhibit 28).

Third, the ground water balance in the Leighton and Associates Assessment is unusual not only in that no runoff is subtracted from rainfall inputs, but it includes no evapotranspiration, underflow into or out of the site, or seepage to surface streams. Although it could be argued that underflow into or out of the site can be reasonably assumed to be unchanged by the development, excluding evapotranspiration from the model might lead to large errors, as evapotranspiration will likely change markedly as a result of development.

Finally, the model makes some assumptions regarding irrigation that are questionable at best. It assumes that ground water recharge through irrigation of landscaped open space will be equal to twice the annual precipitation, and will contribute 141 acre-feet to ground water annually. However, proposed water quality management measures include the use of efficient irrigation systems designed to match evapotranspiration. If these irrigation systems operate as designed, ground water contributions from irrigation (70.5 acre-feet) will be zero. Subtracting 70.5 acre-feet/year from the post-development total of 315.5-400.5 acre-feet/year yields 245-330 acre-feet/year (as compared to the pre-development figure of 292.5 acre-feet/year), suggesting that ground water recharge could decrease as a result of development.

The model also assumes that irrigation of residential space will contribute 50 to 80 inches per year or, given the acreage involved in this project, 142-227 acre-feet/year. This figure is not well supported, but even if accurate, it is reasonable and conservative to use a lower value—as

---

[2] RBF Consulting 2000, "Marblehead Coastal 5-99-260 (MT No.1, LLC), reply to staff response letter of August 11, for coastal development permit application", 8 p. letter to Karl Schwing dated 23 August 2000 and signed by M. N. Nihan.
[3] Unattributed data, "Table 1. Comparison of existing and proposed hydrologic conditions in the central and western canyons", 1 p. table, undated and unsigned.
[4] Unattributed data, "Table 2. Comparison of existing and proposed hydrologic conditions under El Camino Real", 1 p. table, undated and unsigned.
[5] Unattributed data, "Table 3. Comparison of existing and proposed hydrologic conditions in Marblehead Canyon small area hydrograph", 1 p. table, undated and unsigned.
[6] RBF consulting report "Addendum 5: Marblehead Coastal Preliminary Stormwater Management Plan, Water Quality and Quantity Assessment," dated May 2000 and unsigned (and addendum 5A, continuation of appendices)

water becomes an increasingly scarce resource in the future, homeowners are likely to turn to more efficient irrigation systems. Given that the purpose of this model is to assure that ground water supply to the existing and proposed wetlands would be maintained after the development, a more conservative estimate would seem to be prudent. Subtracting some of the assumed 142-227 acre-feet/year from the water budget further decreases the estimate of the amount of post-development ground water recharge.

Thus, it appears likely that the proposed development could significantly impact ground water contributions to the wetlands. Glenn Lukos and Associates analysis titled Hydrological requirements of Alkali Marsh and Alkali Meadow Vegetation on Marblehead Site, San Clemente, California dated 22 August 2000 indicates that the alkali wetlands are maintained primarily by ground water sources.

The applicant has suggested that any uncertainty related to the quantity of water supplied to wetlands under developed conditions can be addressed through a monitoring program. If monitoring were to show that an inadequate supply of water was entering the wetlands, then water could be diverted from the proposed storm water management system to the wetlands. However, this type of monitoring with potential corrective measures may not be sustainable in the long term. Furthermore, as will be noted below, the chemistry of the water is important to the wetlands that exist on the project site. Saline ground water apparently provides the majority of water to the wetlands. The use of surface water in place of saline ground water may result in adverse impacts to the wetlands. Measures could be implemented to adjust the water chemistry, however, this would be accomplished through artificial means which may not be sustainable long term.

Additionally, the distribution of ground water to wetlands in the post-developed condition is of concern. Under existing conditions, ground water enters the wetlands through various seeps throughout the canyons. The proposed project will change these distribution points as a result of grading, the installation of retaining walls and associated drains, and the installation of subdrains and their associated discharge points to the wetlands. Impacts to wetlands could occur due to increased flow in one wetland area and decreases in another as a result of alteration of existing seepage points and placement of sub-drains.

Not only could the amount of ground water recharge and the distribution of that ground water be affected by development, but the quality of that ground water could change as well. The massive grading proposed would result in the creation of thick fills, and much of the material in these fills would be derived from *in situ* materials—including the Capistrano formation, which is known to contain very high levels of particulate sulfate. Disturbance of this material and its incorporation into fills would expose fresh sulfate-bearing mineral surfaces to leaching by ground water, and it is likely that a marked increase in the amount of dissolved solids—particularly sulfate—in ground water would result.

The Preservation, Restoration, and Management Plan states that groundwater discharged to the wetlands from the site is expected to be similar in character to existing groundwater. The Plan bases this statement on an analysis prepared by Leighton & Associates titled Anticipated Groundwater Conditions, Marblehead Coastal Project, City of San Clemente, California dated June 15, 2000, which provides data regarding observed temperature, salinity and conductivity of groundwater at other sites with similar geology which have similar fill characteristics of the proposed project. Based on this data from other sites the analysis concludes that groundwater from the proposed development will have characteristics similar to the existing conditions. However, there is no clear explanation of how the study comes to this conclusion, especially

given that the data shows the salinity and conductivity of the comparative sites is roughly half the measured salinity and conductivity of the on site groundwater. Furthermore, the conclusion of Leighton and Associates is not accompanied by any biological analysis of the effect upon wetlands which may be caused by changes in water chemistry.

Also, the Commission notes that some of the proposed wetlands restoration sites may have dubious quality as mitigation for biological habitat losses since they are being used to treat urban runoff generated by the proposed development. For instance, the detention basins (Restoration Sites 4, 5 and 8) will contain created wetlands that are intended to mitigate for the loss of ephemeral drainages on the project site. In addition, Restoration Site 7 is intended as partial mitigation for impacts to wetlands at Impact Areas A, B1, B2, and C. These wetlands will receive water directly from urban storm drains. While the storm drains will have catch basin inserts to treat the water prior to entering the detention basins, the wetlands within the detention basins are also intended to serve as part of the water quality treatment program. Therefore, as proposed, these wetlands are intended to function more as water quality treatment systems to serve the new development as opposed to habitat mitigation for impacts to biological resources.

The hydrology of the wetlands outside the canyons may also be adversely affected by the proposed project. For instance, several alternatives are presented by the applicant for preserving the alkali wetland in impact area A. The Tributary B wetland which the applicant is proposing to retain is also in this area. These wetlands lie downslope of an area of extensive "cut" according to the conceptual grading plan [7] and the cross section in the applicants' geologic information[8]. At Impact Area A, preserving the wetlands within this grading framework would require a caisson-supported retaining wall with tieback anchors, as detailed in the applicant alternatives analysis. According to the applicants' drawings[9], the wetland would nonetheless remain perched at the top of a six foot slope on its eastern side. Elevation of the wetland varies between 95 and 100 feet above sea level, and the elevation of the terrace/bedrock contact is 91 feet. The applicants' biological analysis [10] indicates that this wetland is maintained primarily by ground water. It further suggests that since the finished grade of the proposed nearby pads is 95 feet, that ground water perched on the terrace/bedrock contact could continue to supply the wetland. This may, indeed, be true, but the extensive cut in the area upslope of the wetland would eliminate many of the flow paths that currently contribute ground water to this wetland as well as the wetland at Tributary B. A more detailed study of the hydrology of this area is required before it can be determined what effect the proposed grading would have on ground water supply to the wetlands at Tributaries A and B.

4. Conclusion – Wetlands

The proposed project will result in the fill of wetlands on the project site. However, it has been demonstrated that there are alternatives which are less environmentally damaging than the proposed project. Therefore, the proposed project cannot be found consistent with Section 30233 of the Coastal Act. Also, the proposed project will result in large amounts of intensive development within 100 feet of, and sometimes as close as 5 feet to wetlands on the project site.

---

[7] Robert Bein, William Frost and Associates 2000, "Earthwork volume analysis", 1 p. schematic drawing dated 20 September 2000 and unsigned.

[8] Leighton and Associates 2000, "Response to item E of the California Coastal Commission letter dated August 11, 2000, pertaining to the Marblehead Coastal Property, tentative tract 8817, City of San Clemente, California, coastal development permit 5-99-260", 2 p. letter report to Mr. Jim Johnson dated 18 September, 2000 and signed by T. Lawson (CEG 1821; PE 53388).

[9] Robert Bein, William Frost and Associates 2000, "Wetlands avoidance plan--Alternative 1", 1 p. schematic drawing, undated and unsigned.

[10] Glenn Lukos and Associates 2000, "Wetlands Avoidance of "Area A"", 1 p. letter report to Michael H. Nihan dated 20 September 2000 and signed by T. Bomkamp

The failure of the proposed project to provide adequate buffers threatens to significantly degrade the wetlands. In addition, there are significant issues relating to impacts upon wetland hydrology and water quality which have not been resolved. Therefore, the proposed project cannot be found consistent with Section 30230, 30231, and 30240(b) of the Coastal Act. Therefore, the project as proposed must be denied.

E. BIOLOGICAL RESOURCES

Section 30240 of the Coastal Act states that:

> *(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.*
>
> *(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

Section 30250 of the Coastal Act states:

> *(a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.*

The proposed project would result in impacts to biological resources, including coastal sage scrub and Blochman's dudleya. The project will also result in impacts to wetlands. This section contains a description of all of the biological resources, including wetlands, and associated impacts in order to provide a comprehensive view of the biological resources which are present on the site and the impacts to those resources. However, impacts to wetlands and their relationship to Coastal Act policy are more fully discussed in the "Wetlands" section of these findings.

The Marblehead site consists of approximately 250 acres, of which the most seaward 189 acres are in the coastal zone. The project site has been used for a variety of purposes in the past (Exhibit 2). For instance, between 1949 and 1969 a sewage treatment plant was located on approximately 18 acres in Marblehead Canyon. The more level upland areas of the project site have been used for agriculture. Some of these same level upland areas have been used for the placement of soil stockpiles, construction staging areas, and a seasonal carnival. There are several unpaved roads which cross the area.

Meanwhile, there are two primary canyons on the project site, the western canyon and the larger Marblehead Canyon. These canyons contain a variety of sensitive habitat areas. The western canyon is approximately 2,300 linear feet long, runs roughly north-south, and is roughly perpendicular to the bluff face and El Camino Real. Alkali meadow wetlands course through the

canyon bottom. Ephemeral drainages are found at the head of the canyon. The mouth of the canyon was graded by the emergency grading in 1990. Coastal sage scrub, annual grasslands and needlegrass grasslands cover the slopes that form the canyon walls. In addition, a population of Blochman's dudleya is located near the mouth of the canyon. This canyon contains habitat which has been occupied by California gnatcatcher according to a 1997 survey.

Marblehead Canyon is the largest canyon on the project site (3,700 linear feet) and roughly bisects the property running in a north-south configuration perpendicular with the bluffs and El Camino Real. Alkali meadow, freshwater, and mulefat scrub wetlands course through the canyon bottom. The slopes of the canyon are covered by coastal sage scrub, annual and needlegrass grasslands. There is a canyon which branches off the main part of Marblehead Canyon which contains wetlands, coastal sage scrub, and annual grassland. Ephemeral drainages are found at the heads of the various branches of this canyon. This canyon contains habitat which has been occupied by California gnatcatcher according to a 1997 survey.

A third smaller ravine west of the western canyon also contains wetlands, coastal sage scrub and Blochman's dudleya. Ephemeral drainages occur at the head of the ravine. Meanwhile, part of the mouth of the ravine was graded in 1990 in the emergency bluff stabilization. This ravine contains habitat which has been occupied by California gnatcatcher according to a 1997 survey.

There is also a small canyon located between the western canyon and Marblehead Canyon which contains coastal sage scrub and pine woodland. This canyon is roughly trident-shaped. Ephemeral drainages occur at the head of each trident. The mouth of the canyon was graded in 1990.

The bluffs overlooking El Camino Real and the Pacific Ocean range in height between 70 feet and 100 feet. Coastal sage scrub and Blochman's dudleya are found in areas not disturbed by the 1990 grading.

There is one blue-line stream (the Sequnda Deschecha channel) on the United States Geologic Service (USGS) map for the area which is immediately adjacent to and outside the project site (Exhibit 1) adjacent to the Blochman's dudleya reserve. According to the applicants' submittal, the proposed development will not result in impacts to this channel.

Appendix A lists the biological field surveys prepared for the project site submitted by the applicant which identify and characterize the resources found on the site. These studies formed the basis for the analysis of biological resources and potential impacts in the Marblehead Coastal Final Environmental Impact Report dated June 1998 (FEIR), the Addendum to Final Environmental Impact Report (Addendum FEIR) dated February 2000, and the Marblehead Coastal Project Preservation, Restoration and Management Plan for Wetlands, Sage Scrub and Other Upland Habitats dated July 7, 2000, for the Marblehead project. Supplemental analyses of biological impacts were also submitted by the applicant and are listed in Appendix A.

1. Habitat Areas on the Marblehead Site

There are several plant communities that were found on the Marblehead site, including coastal bluff scrub, southern cactus scrub, sagebrush scrub, coyote bush scrub, saltbush scrub, annual grassland, native needlegrass grasslands, alkali marsh, freshwater marsh, mulefat scrub, Allepo Pine woodland, disturbed ruderal habitat (Exhibit 17). In addition to these habitat areas, one

sensitive non-wetland plant species was identified, Blochman's dudleya. Following is an acreage breakdown of the habitat types identified on the Marblehead site:

PLANT COMMUNITY		ACRES OF HABITAT IN THE COASTAL ZONE
Coastal Sage Scrub	Coastal bluff scrub	3.70
	Southern Cactus Scrub	0.90
	Sagebrush Scrub	1.55
	Coyote Bush Scrub	2.73
	Saltbush Scrub	8.45
Grassland	Annual Grasslands	37.30
	Needlegrass Grasslands	0.31
Wetlands	Alkali Marsh	3.44
	Alkali Meadows	0.59
	Freshwater Marsh	0
	Seasonal Wetlands	0.21
Riparian (wetlands)	Mulefat Scrub	0.71
Developed	Ornamental Landscaping	0.62
Disturbed/Ruderal	Disturbed or Barren	120.21
Other	Pine Woodlands	8.15
	Naturalized Exotics	0.75

Additionally, the FEIR identifies the habitats, plants, or animals considered to be "sensitive" under a variety of criteria including: 1) listing as rare, threatened, or endangered under the Federal and/or State Endangered Species Acts; 2) State or Federal Candidates for listing as rare, threatened or endangered; 3) California Species of Special Concern; 4) Special Plants or Animals as listed by the Department of Fish and Game; 5) plant species included in the California Native Plant Society's "Inventory of Rare and Endangered Vascular Plants of California"; or 6) plant or animal species considered locally uncommon or declining by biologists familiar with regional population trends.

a. Coastal Sage Scrub Community

According to the applicants' submittal, there are 17.34 acres of coastal sage scrub on the project site within the coastal zone. The coastal sage scrub community consists of several types of scrub habitats including coastal bluff scrub, southern cactus scrub, sagebrush scrub, coyote bush scrub, and saltbush scrub. According to the FEIR, the presence of California box thorn (Lycium californica), California sagebrush (Artemisa californica), California bush sunflower (Encelia californica) and Brewer's saltbush (Atriplex lentiformis) characterize the coastal bluff scrub community. On the Marblehead site, the Blochman's dudleya has been found in association with this plant community. The southern cactus scrub community is characterized by the presence of prickly pear cactus (Opuntia littoralis). The sagebrush scrub community is characterized by the presence of dense stands of California sagebrush. Coyote bush scrub is characterized by the presence of Coyote bush (Baccharis pilularis consanguinea). Finally, saltbush scrub contains Brewer's saltbush (Atriplex lentiformis lentiformis).

b. Grassland Community

According to the applicants' submittal there are 37.30 acres of annual grassland on the project site within the coastal zone and 0.31 acres of needlegrass grasslands. The annual grasslands are found primarily on the slopes of the canyons and drainages on the project site. Species present include wild oats (Avena sp.) and chess grass (Brome sp.). From late spring to early summer, black mustard (Brassica nigra) is present in this community. Needlegrass grasslands are characterized by the presence of needlegrass (Nasella sp.).

c. Wetlands

There are 4.95 acres of wetlands in the project area within the coastal zone. These wetlands are comprised of alkali marsh, alkali meadow, seasonal wetland, and mulefat scrub. The alkali marsh and meadow and seasonal wetlands are characterized by the presence of alkali heath (Frankenia salina), coastal salt grass (Distichilis spicata spicata), and common woody pickleweed (Salicornia virginica), coastal bulrush (Scirpus robustus) and slender cattail (Typha domingensis). These wetland areas are not subject to tidal inundation. The presence of these plants indicates there are alkali soils in the drainages. Mulefat scrub areas contain arroyo willow (Salix lasiolepis) and mulefat (Baccharis salicifolia).

d. Developed

There are 0.62 acres of which have been identified by the applicant as "developed" because they contain ornamental vegetation. Ornamental vegetation includes trees and groundcover. Iceplant (Malephora crocea) is the dominant plant cover.

e. Disturbed/Ruderal

There are 120.21 acres which have been described as disturbed/ruderal. These areas include slope stabilization and graded areas, dirt roads, and areas which have been cleared and disked on a regular basis.

f. Other

According to the applicant there are 8.15 acres of area described as pine woodland and 0.75 acres of area described as naturalized exotics. The pine woodland areas contain allepo pines (Pinus halepensis), which the FEIR describes as a planted ornamental tree. These areas have an open canopy of allepo pines and an understory of annual grassland.

Areas characterized as naturalized exotics include ornamentals and annual grasslands which the FEIR states have invaded bluff habitat areas.

g. Plants

In addition to the habitat areas, one sensitive plant species was identified on the Marblehead site, the Blochman's dudleya (*Dudleya blochmaniae ssp. Blochmaniea*). The Blochman's dudleya is a perennial succulent plant species found on coastal bluffs from San Luis Obispo County, California, into the Baja peninsula. The Blochman's dudleya is a small plant which grows with spring rainfall, flowers in April and May and then remains dormant during the summer and fall. The plant survives on starch reserves stored in the underground caudex or stem, similar to a bulb. The plant reproduces primarily by seed but can reproduce vegetatively, via detached leaves. The plant is found on the margin of open areas on coastal bluffs and usually in association with other native plants such as California boxthorn, California sagebrush, coastal goldenbush (Isocoma menseisii), golden tarplant (Hemizonia fasiculata) and the lance leaf dudleya (Dudleya lanceolata). The California Native Plant Society has placed Dudleya blochmaniae on List 1B of their inventory of Rare and Endangered Vascular Plants.

2. <u>Wildlife on the Marblehead Site</u>

According to the FEIR, a variety of wildlife are expected within the coastal sage scrub habitats on the project site. Amphibians include the Pacific slender salamander (Batrachoseps pacificus), western toad (Bufo boreas), and Pacific treefrog (Hyla regilla). Reptiles include side-blotched lizard (Uta stansburiana), western whiptail (Cnemidophorus tigris), and gopher snake (Pituophis melanoleucus). Bird species include California towhee (Pipilo crissalis), Bewick's wren (Thrymmanes bewickii), western kingbird (Trannus verticalis), rufous-sided towhee (P. erythrophthalmus), scrub jay (Aphelocoma coerulescens), bushtits (Psaltriparus minimus), coastal California gnatcatcher (Polioptila californica), and house finch (Carpodacus mexicanus). Open shrub areas provide foraging areas for raptors including red-tailed hawk (Buteo jamaicensis), turkey vulture (Cathartes aura) and American kestrel (Falco sparverius). Small mammals include deer mouse (Peromyscus maniculatus), and house mouse (Mus musculus). Large mammals include California ground squirrel (Spermophilus beecheyi), desert cottontail (Sylvilagus audubonii), long tailed weasel (Mustela frenata), striped and spotted skunks (Mephitis mephitis and Spilogale gracilis), and coyote (Canis latrans). Woodrats (Neotoma spp.) may also be present.

According to the FEIR, wildlife expected in grasslands include birds such as towhees, sparrows, quail, and finch. In addition, lesser and American goldfinches (Carduelis psaltria and C. tritis) would also be found. Raptors include turkey vulture, red tailed hawk, black shouldered kite (Elanus caeruleus), American kestrel, barn owl (Tyto alba) and great horned owl (Bubo virginianus). Small mammals include deer mouse, house mouse, California ground squirrel, cottontail skunks, and coyote. In addition, California vole (Microtus californicus) and Botta's pocket gopher (Thomomys bottae) would be present.

Wildlife in wetland habitats include the Pacific tree frog (Hyla regilla) (was the only recorded amphibian) although, according to the FEIR, other amphibians mentioned above are likely. Birds specific to riparian areas include snowy egret (Egretta thula), American koot (Fulica americana), common yellow throat (Geothlypis trichas), and red winged blackbird (Agelaius phoeniceus).

According to the FEIR, one sensitive species of wildlife has been recorded on the project site, the coastal California gnatcatcher (Polioptila californica). The California gnatcatcher is listed by the U.S. Fish and Wildlife Service (USFWS) as threatened. According to the FEIR, the California gnatcatcher is an obligate, year-round resident of coastal sage scrub vegetation communities. California gnatcatchers primarily feed upon insects which are eaten directly off of coastal sage scrub vegetation.

In addition to the species identified in the FEIR, previous biological surveys have identified species which were not identified by the most recent surveys. For instance, according to the 1991 Biological Assessment Update prepared by Fred Roberts, a 1985 biological survey titled Biological Assessment Update for the Marblehead Coastal Project prepared by Karlin Marsh and Gordon Marsh noted that the project site was "…locally significant for raptors, including one species, the northern harrier, which is considered rare by the California Natural Diversity Data Base…".

Also, Commission staff's biologist, Dr. John Dixon, visited the project site in April 2000. During this visit, Dr. Dixon observed a white-tailed kite (Elanus leucurus) foraging on the project site. In addition, Dr. Dixon observed a Loggerhead shrike (Lanius ludovicianus) perched on a pine snag. The white-tailed kite is a state listed Fully Protected species. In addition, the Loggerhead shrike is a state listed Species of Special Concern.

Some species that dwell off-site but periodically visit the site are important to maintaining the current balance of wildlife on the site. For instance, the FEIR notes that coyote are present on the project site. Larger predators, such as the coyote, are important in controlling the presence of smaller predators that prey on avian species. In the absence these larger predators, the diversity of avian species at the site is likely to notably decrease[11].

3. Environmentally Sensitive Habitat Areas

Section 30240 of the Coastal Act requires that environmentally sensitive habitat areas be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. On the Marblehead project site, at least one habitat, the Blochman's dudleya, is an environmentally sensitive habitat area (ESHA). On the basis of the information available to the Commission at this time, the Commission is unable to determine whether the coastal sage scrub present on the Marblehead site satisfies the statutory definition of ESHA.

Section 30107.5 of the Coastal Act states:

> *"Environmentally sensitive area" means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.*

a. Blochman's dudleya

The California Native Plant Society (CNPS) has placed Dudleya blochmaniae on List 1B of their Inventory of Rare and Endangered Vascular Plants. According to the CNPS classification, the plant is eligible for state listing as an endangered species. However, the California Department of Fish and Game has not recommended listing or candidate status. In addition, the Dudleya blochmaniae is not a federal candidate species for listing as endangered or threatened.

The Dudleya blochmaniae is found at three known sites in Orange County at the Dana Point Headlands, San Clemente State Beach, and at Marblehead, the project site. Within Orange County, the Marblehead site has the largest population. A 1991 biological assessment (1991 Biological Assessment Update Marblehead Coastal Project Site, San Clemente, California) by Fred Roberts states that the estimated population of Dudleya blochmaniae was approximately 10,500-12,000 individual plants. The Dana Point Headlands has a population of approximately 250 plants according to the Dana Point Headlands Specific Plan Draft EIR. The San Clemente State Beach population is estimated as 150-300 plants. Additionally, there is a Camp Pendleton population in San Diego County estimated at perhaps 500 plants.

Roberts lists several factors which limit the spread of the Blochman's dudleya. These are that the plant: requires a specific maritime climate; is found near the coast; has very specific soil requirements; and does best where there is little or no competition from other plants. Roberts also notes that the population must be shielded from long-term impacts, such as future development.

[11] Crooks, K.R. and M.E. Soulé. 1999. Mesopredator release and avifaunal extinctions in a fragmented system. Nature 400:563-566.

In April 1990, Robert Bein, William Frost & Associates prepared a Dudleya blochmaniae Protection and Salvage Program for the Marblehead Coastal Site. The stated goal of the salvage program was "...to minimize damage to the plant during emergency grading, and to salvage as many plants as possible to allow subsequent re-establishment onsite and/or relocation offsite." According to the report, an estimated 5,000 plants were salvaged and transported to the Tree of Life Nursery in San Juan Capistrano. The 1991 reports by Roberts contradicts this 5,000 figure and states that only 3,700 Dudleyas were recovered from the salvage operation prior to grading while an estimated 2,900 plants were destroyed. Subsequent research by Commission staff in 1994 discovered that the salvaged plants died at the nursery because no provisions were arranged for their care. Roberts also reported that an estimated 4,200 plants remained in the Phase II (3,600) and III (600) portions of the project site. The Marblehead FEIR indicates that there are presently 3,600 individuals present along the bluffs at the northern portion of the project site. However, there is no indication that the 600 plants identified by Roberts in 1991 are still present in the Phase III area of the project site.

The Dudleya blochmaniae is only found in a few small populations throughout the State and Mexico. This small population and limited range cause the Dudleya blochmaniae to be rare. In addition, the population at the Marblehead project site is especially large compared with other populations in the region, causing that population to be especially valuable. Furthermore, due to the very specific conditions upon which the Dudleya blochmaniae are dependent to survive, the Dudleya blochmaniae could be easily disturbed by human activity. Therefore, the Commission finds that the Dudleya blochmaniae on the Marblehead site are environmentally sensitive areas under Section 30107.5 of the Coastal Act because they are rare and especially valuable plants which are easily disturbed by human activities.

b. Coastal Sage Scrub

"Coastal sage scrub" or "soft chaparral" is a general vegetation type characterized by special adaptations to fire and low soil moisture. The defining physical structure in CSS is provided by small and medium-sized shrubs which have relatively high photosynthetic rates, adaptations to avoid water loss, including drought deciduousness, and adaptations to fire, such as the ability to survive the loss of above-ground parts and resprout from root crowns. In addition to twenty or so species of perennial shrubs, such as California sage brush, CSS is home to several hundred species of forbs and herbs, such as the California poppy. For convenience in mapping and management, CSS periodically has been divided into many types and sub-types, such as "southern coastal bluff scrub" and "Diegan sage scrub," based on geographic location, physical habitat, and species composition.[12] Some of these types may be comprised of distinct groups of co-evolved species that represent some underlying evolutionary reality, but many simply document current patterns of association that are sufficiently common to warrant a name.

About 18 ac of various types of coastal sage scrub habitats are present on the Marblehead site. The stands are degraded, scattered throughout the several drainages and interspersed with non-native grasslands. The flat portions of the site are disked and do not support perennial vegetation. Despite the fragmented and degraded nature of the scrub habitats that are present, they are occupied by the California gnatcatcher (federally designated as "threatened"), a species dependent on scrub habitats. The presence of two pairs of gnatcatchers was

[12] Axelrod, D.I. 1978. The origin of coastal sage vegetation, Alta and Baja California. American Journal of Botany 65:117-131; Holland, R.F. 1986. Preliminary descriptions of the terrestrial natural communities of California. Unpublished report. Sacramento, California Department of Fish and Game; Sawyer, J.O. and T. Keeler-Wolf. 1995. A manual of California vegetation. Sacramento, California Native Plan Society.

documented in 1990, one pair was observed in 1996, and two pairs were recorded in 1997.[13] Additional surveys done in 1999/2000 indicate that up to three pairs occupied the site.[14] One pair and at least one other individual were observed by the applicant's biological consultant during an agency site visit in 2000.[15] The location of these birds has not been the same each year. Therefore, it appears likely that the site has generally supported two pairs of California gnatcatchers and much of the scrub habitat may potentially be occupied at one time or another.

Marblehead will be covered by the South Subregion Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP), which is being prepared by the California Department of Fish and Game (CDFG) and the U. S. Fish and Wildlife Service (Service). However, no written plan has been prepared to date. When completed, this plan will cover an overall area of about 130,000 acres, encompassing a variety of land uses and habitats. As planned, the 250-acre Marblehead project will result in the loss of about 16.5 of the 18 ac of coastal scrub and the "take" of probably two pairs of California gnatcatchers[16], which is permitted by a Special 4(d) "take" authorization that has already been issued by the Service (Exhibit 20).[17] According to the Special 4(d) "take" authorization letter, such authorization may be granted prior to the formal adoption of the South Subregion NCCP/HCP when a proposed "take" meets certain criteria outlined in the NCCP Process Guidelines. These criteria include measures related to cumulative losses of coastal sage scrub habitat within the affected subregion, avoidance of interference with habitat connectivity, and minimization of the impact, among other criteria (Exhibit 20). As pointed out by the applicant's consultant (Exhibit 27), by this action the Service has determined "…that existing coastal sage scrub (CSS) and gnatcatchers on the Marblehead Coastal property are not "essential to the conservation" of the gnatcatcher and not in need of "special management considerations."[18] In addition, the Marblehead site is not included as Critical Habitat in the designation by the Service. It may be the case that the California gnatcatcher species may not be dependent on the survival or reproductive success of those gnatcatcher pairs presently utilizing coastal sage scrub at Marblehead, or of other pairs that might occupy that habitat in the future.

The question remains, "Is the coastal sage scrub on the Marblehead property an Environmentally Sensitive Habitat Area (ESHA) under the Coastal Act?" There seems to be an emerging opinion among developers' consultants that if an area is covered by an NCCP/HCP and if it is not designated for conservation, it is *ipso facto* not ESHA. For example, in another matter a consultant wrote, "Although coastal sage scrub has in some areas been considered a sensitive habitat because of its connection to the California gnatcatcher, the coastal sage scrub in all of the surveyed areas do not represent occupied habitat. Its lack of uniqueness or special habitat value was officially confirmed by the decision of the California Department of Fish and Game and the U.S. Fish and Wildlife Service in approving the Central Coast Natural Communities Conservation Plan…."[19] In the present matter the applicant's consultant concludes that, "…based on the findings and actions of both CDFG and the Service in regards to the Marblehead Coastal property, it does not make sense to designate the CSS and occupied gnatcatcher habitat located on the Marblehead site as an ESHA."[20] The Commission believes

---

[13] City of San Clemente. 1998. Final Environmental Impact Report. Marblehead Coastal General Plan Amendment 96-01, Specific Plan 95-02, Tentative Tract Map. State Clearing House Number 95091037. A report prepared by David Evans and Associates dated June 1998 and adopted August 5, 1998.
[14] Bartel, J.A. and W.E. Tippets. 2000. Letter to James Hare, City of San Clemente, authorizing incidental take of gnatcatchers at Marblehead.
[15] Tony Bombcamp personal communication to John Dixon April 5, 2000.
[16] City of San Clemente, 1998, op. cit.
[17] Bartel and Tippets, 2000, op. cit.
[18] Meade, R. J. 2000. Memo to Karl Schwing dated November 28, 2000.
[19] emphasis added.
[20] Mead, 2000, op. cit.

that these analyses are incorrect because they are critically reliant on three fallacious assumptions: 1) that coastal sage scrub is a sensitive habitat only because of its importance to listed species, particularly the California gnatcatcher, 2) that if an area is subject to an NCCP/HCP, but not designated conservation, this fact demonstrates that the resource agencies consider the area to have no special habitat value, and 3) that there is no sensible basis upon which to designate an area as ESHA if it is covered by an NCCP/HCP but not protected.

First, it is important to recognize that coastal sage scrub, as a habitat type, can qualify as ESHA regardless of the presence of California gnatcatchers. Indeed, if the gnatcatcher became extinct, CSS could still be ESHA. Section 30107.5 of the Coastal Act states, "'Environmentally sensitive area' means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments." It is probably universally accepted among specialists that CSS is easily degraded and in fact has been destroyed by development over large areas of the state.[21] About 2.5% of California's land area was once occupied by CSS. In 1981, it was estimated that 85% to 90% of the habitat type had been destroyed state-wide and, in 1991, it was estimated that San Diego, Orange, and Riverside counties had lost 66% of their CSS.[22] Current losses are higher and losses in the coastal zone have undoubtedly been much higher. Compared to its natural distribution and abundance, CSS is in decline and it is in decline because it has been destroyed by human activities. Unfortunately for the habitat type, it occupies shallow slopes on lower elevations of coastal mountain ranges, areas that are understandably prized for development. Besides being in decline, CSS provides important ecological functions. It can be home to some 375 species of plants, many of which are local endemics. About half the species found in CSS are also found in chaparral after fire, but disappear from that habitat after about 7 years. CSS may provide a spatial refuge for those herbs between fires.[23] Nearly, 100 species of rare plants and animals are obligately or facultatively associated with coastal sage scrub habitats.[24] In addition, coastal sage scrub is often the natural upland habitat adjacent to wetland habitats such as coastal salt marshes and vernal pools, and is important to species that require both habitat types to complete their life cycle.

The second incorrect assumption is that areas not protected under an NCCP/HCP have been implicitly designated as unimportant habitat by the resource agencies. It must be recognized that the NCCP/HCP effort is a process by which resources in some areas are sacrificed to development in exchange for permanent protection of other resources in other areas. The actual trades that take place are determined in the context of a regional planning effort. This effort incorporates both ecological needs and development constraints. For example, to insure the long-term perpetuation of biological diversity within a region, it might be more important to protect degraded habitat that provides a critical movement corridor than to protect pristine habitat that is isolated from the major habitat blocks within the planning area. It also is the case that good habitat is sacrificed in some areas of prime development potential in order to provide an incentive to municipalities and property owners to participate in the NCCP/HCP program if the net effect is believed to be most protective of resources over the long run. At heart, this is a

[21] Mooney, H.A. 1977. Southern Coastal Scrub. Pages 471-489 in M.G. Barbour and J. Major, eds. Terrestrial Vegetation of California. Davis, U.C. Press; Westman, etc

[22] Westman, W.E. 1981. Factors influencing the distribution of species of California coastal sage scrub. Ecology 62:439-455; Michael Brandman Assoc. 1991. A rangewide assessment of the California gnatcatcher. A report to the Building Industry Association of Southern California cited by J.E. O'Leary, et al. 1994, below.

[23] Westman, W.E. 1979. A potential role of coastal sage scrub understories in the recovery of chaparral after fire. Madroño 26:64-68.

[24] O'Leary, J.F., et al. 1994. Bibliographies on coastal sage scrub and other related malacophyllous shrublands of Mediterranean-type climates. California Wildlife Conservation Bulletin No. 10.

negotiated process and therefore it is also somewhat dependent on the skill of the negotiators for the various interests. These ecological and practical constraints and compromises are part and parcel of natural community conservation planning and demonstrate that no inferences regarding quality or value, particularly the local quality and value, of habitats can be drawn simply from the fact that a particular area is not protected by the governing plan.

Finally, there actually are many sensible bases for designating as ESHA some areas that have not been protected under a regional NCCP/HCP. For example, even degraded coastal sage scrub may provide essential habitat for species that require both CSS and saltmarsh plants to complete their life cycle. In the heart of urban environments, CSS may still support many bird species when there is sufficient open space to include coyotes in the system. High quality coastal sage scrub also may be of significant value in heavily urbanized areas by contributing to the local diversity of vegetation, even if it is so isolated as to lose much of its wildlife value. In addition, some categories of coastal sage scrub, such as southern coastal bluff scrub, are so rare that they may be inherently deserving of protection wherever they are found. Of course, if a stand of coastal sage scrub is home to listed species, the presumption should generally be that the habitat is ESHA in the absence of compelling evidence to the contrary.

It is evident that California coastal sage scrub is a habitat that could qualify for the designation as ESHA under the Coastal Act, regardless of the presence of the California gnatcatcher or any other particular species. However, does the fact that vegetation designated as "coastal sage scrub" potentially qualifies as ESHA imply that every particular stand of CSS must be so characterized? Generally speaking, the answer to that question must be "No." Section 30240 of the Coastal Act protects ESHA from any significant disruption of habitat values and confers considerable protection to adjacent areas. Given the far reaching implications of designating an area as ESHA, it is incumbent upon the Commission to use this designation with regard to a general category of habitat such as coastal sage scrub only where the local habitat itself meets the test of being rare or especially valuable because of its special nature or role in an ecosystem. However, in this context it is important to remember that the meaning of the word "ecosystem" does not contain any guidance as to the portion of the biosphere included. An ecosystem is simply the combination of a biotic community and its environment. It is up to the practitioner to define the boundary of any "ecosystem" under consideration. It could encompass the world or only the practitioner's own back yard. Therefore, a local area could certainly be an ESHA if it provides an important function in a local ecosystem, regardless of its regional significance. In summary, a case-by-case analysis is required, which has always been the Commission's approach.

In the case of Marblehead, there are several types of coastal sage scrub present. At the rare end of the spectrum is coastal bluff scrub which is present in several small patches and at the other end is coyote bush which is common and tolerant of disturbance. Most of the CSS at Marblehead is degraded and occurs in small patches adjacent to non-native grassland. Although it provides significant habitat value for song birds and for raptors, the Commission finds that that most of the CSS could not be characterized as ESHA were it not for the persistent presence of one or more pairs of California gnatcatchers. If this coastal sage scrub has supported successful reproduction by this listed species, based on existing conditions, the areas of CSS and other habitat within the use area of the gnatcatchers should be designated ESHA under the Coastal Act. On the other hand, the applicant's consultant has raised the specter of the local CSS acting as an ecological "sink" to the detriment of the gnatcatcher species. In the parlance of conservation biology a "sink" is an area of habitat where, for a species under consideration, mortality exceeds production of new individuals. Under such a regime, in the absence of colonization the local population will become extinct with only local implications.

However, if the habitat continues to attract dispersing individuals which would otherwise successfully reproduce elsewhere, then the habitat is actually damaging in a regional context. If the Marblehead CSS actually is acting as a regional "sink," then it is an "attractive nuisance" for gnatcatchers and should not be classed as ESHA unless it provides valuable functions for other species. Unfortunately, there are no data beyond the simple observations of gnatcatcher presence and habitat use and the physical descriptions of the site and its biota. The data necessary to answer the question definitively would require a multi-year study of the reproductive success of banded birds, which would also allow one to assess immigration and emigration. These data are not available and probably will never be available. Given the existing evidence, one can easily imagine two reasonable scenarios. First, the resident pairs of gnatcatchers successfully fledge young that either disperse to other areas inland or remain in the area when space is opened due to the mortality of local adults. In addition, some transients from other areas occasionally arrive and take up residence when space is available. Second, the resident pairs of gnatcatchers do not produce enough young to replace themselves and the local population of two pairs is maintained by the occasional arrival of dispersing individuals that would have reproduced successfully elsewhere if the Marblehead habitat was not in existence. Given the first set of facts, the Commission could call the area ESHA. Given the second, the Commission may not. In view of the existing uncertainty, the precautionary principle would require that the ecologically conservative alternative be followed. In this case, one alternative has a positive effect and the other a negative effect, so the conservative alternative is not obvious. Nevertheless, in the absence of convincing expert argument to the contrary and based on the principle of parsimony, the Commission would have recommended that the Commission consider the various scrub habitats and adjacent gnatcatcher use areas to be ESHA.

However, in order to clarify this issue Commission staff discussed the issue at some length with Dr. Dennis Murphy who was a member of the Scientific Advisory Panel for California's Natural Communities Conservation Planning effort and a principal author of that group's Conservation Guidelines. At Commission staff's request, Dr. Murphy wrote a letter wherein he discusses the issues relating to coastal sage scrub at the Marblehead site. After acknowledging the lack of pertinent data, he offers his professional opinion that the site is more likely acting as a regional "sink" for gnatcatchers than providing a marginal benefit.

Based on the evidence currently available to the Commission, the Commission cannot determine if the coastal sage scrub habitat at the subject site is ESHA. A study of gnatcatcher reproductive success during at least one reproductive cycle, and potentially other information regarding the value and nature or role of the various species in the coastal sage scrub and their susceptibility to disturbance, would be valuable in determining whether the coastal sage scrub at the site is ESHA. If the coastal sage scrub on the site is indeed ESHA, Section 30240 of the Coastal Act places important restrictions on the use of these areas. In the absence of additional information concerning the reproductive success of the gnatcatchers present on the Marblehead site, the Commission cannot now determine whether or not the coastal sage scrub on the Marblehead site is ESHA within the meaning of section 30107.5 of the Coastal Act.

4. Cumulative Impacts on Coastal Resources

Although not all the vegetated habitats at the Marblehead site ought to be categorized as "ESHA," they all do provide habitat value and some provide quite significant value. For example, the foraging value of annual grasslands and open scrub to raptors is important. Coastal sage scrub, whether ESHA or not, does provide valuable habitat to a variety of wildlife on the project site, as noted above. These habitat areas also serve as important buffer areas for wetlands on the project site.

Where development has significant adverse effects, either individually or cumulatively, to coastal resources, mitigation and other steps to minimize adverse effects would be appropriate under section 30250 of the Coastal Act.

5. Impacts

The proposed project will involve the mass grading of the site and result in the construction of structures on the subject site. In addition, this application seeks to make permanent the emergency grading undertaken in 1990. The proposed development will result in impacts to biological resources on the project site. In addition, the work previously undertaken in 1990 resulted in impacts to biological resources.

The following table details the acreage of each habitat type that would be removed for the proposed development and the quantity of habitat preserved and mitigated:

PLANT COMMUNITY		EXISTING HABITAT	IMPACTED	PRESERVED	MITIGATED ON-SITE	MITIGATED OFF-SITE	NET
Coastal Sage Scrub		17.34	14.37	2.97	16.49	30	46.49
Grassland	Annual Grasslands	37.30	37.30	0	0	0	0
	Needlegrass Grasslands	0.31	0.31	0	0.30	0	.30
Marsh	Alkali Marsh	3.44	0	3.44	0	0	3.44
	Alkali Meadows	0.59	0.08	.51	0.17	0	.68
	Freshwater Marsh	0	0	0	0.93	0	.93
	Seasonal Wetlands	0.21	0.01	0.20	.028	0	.228
Riparian (in CZ only)	Mulefat Scrub	0.71	0	0.71	0	0	.71
Developed	Ornamental Landscaping	0.62	0.62	0	0	0	0
Disturbed/ Ruderal	Disturbed or Barren	120.21	120.21	0	0	0	0
Other	Pine Woodlands	8.15	8.15	0	0	0	0
	Naturalized Exotics	0.75	0.75	0	0	0	0

In addition to the development now proposed, implementation of the emergency Phase I grading project resulted in the recontouring of 1,840 linear feet of coastal bluffs and the disruption of habitat up to 650 feet inland. Earth removed during the grading operation was stockpiled in the central portion of the site, burying approximately 30 acres of habitat in the coastal zone. According to the 1991 biological assessment prepared by Roberts, this development resulted in adverse impacts to several plant communities including annual and native grasslands, coastal bluff scrub, Blochman's dudleya or maritime bluff scrub, and wetlands. These impacts are as follows: annual grassland – 47 acres impacted; needlegrass grassland - 2.5 acres impacted; coastal bluff scrub - 3.0 acres impacted; Blochman's dudleya - 3.5 acres or 6,500 to 8,000 plants impacted; and wetlands – 0.1 acres impacted.

As described above, the project site's plant communities provide valuable habitat for a wide variety of animal species. The habitats provide food and water, shelter, sites for breeding and

materials for nest building. The grading and construction of structures, as proposed, necessitates the removal of vegetation resulting in the loss of acres of habitat for wildlife. Small, slow-moving, or burrowing animals may be killed as a result of the grading operations. Some animals may be able to relocate to other areas, but competition with species already living there may preclude the long-term survival of displaced animals.

As noted in the project description, the applicant is proposing mitigation for the proposed impacts. This mitigation includes restoration of 16.49 acres of coastal sage scrub on the graded slopes of Marblehead Canyon and the western canyon. Also, impacts to the California gnatcatcher will be mitigated off-site with the acquisition of development rights and establishment of a conservation easement over 50 acres of land containing 30 acres of existing coastal sage scrub and 12 pairs of California gnatcatchers. Impacts to needlegrass would be mitigated by translocating 0.3 acres of needlegrass habitat to Marblehead Canyon and the Blochman's dudleya reserve. Impacts to 0.08 acres of alkali meadow wetlands would be mitigated with the creation of 0.17 acres of alkali meadow wetlands on-site. In addition, 0.01 acres of seasonal wetlands impacted would be mitigated with 0.028 acres of seasonal wetlands on-site. Mitigation for impacts to the Blochman's dudleya are simply to complete the translocation plan being implemented under Coastal Development Permit 5-97-136. Finally, the applicant is proposing to contribute $100,000 to the property owner's association for long-term on-site habitat management. Off-site mitigation areas would be managed by a separate $106,000 endowment.

In addition to mitigation measures, the FEIR considered 7 alternatives to the Marblehead project[25]. These alternatives include:

1. No Project Alternative
2. No Development
3. Alternative Land Use
4. Residential Alternative
5. Reduced Site Coverage with Wetland Avoidance
6. Reduced Commercial Development with Wetland Avoidance
7. Proposed Project on an Alternative Site

The FEIR also considered project design alternatives relating to:

- Alternative design and alignments of Avenida Vista Hermosa
- Avoidance of sage scrub habitat on-site

Several of the alternatives identified above would result in lesser or no direct impacts upon biological resources. For instance, the no development alternative would cause the site to remain vacant. According to the FEIR, the no project alternative would result In the elimination of public access and recreation benefits offered by the proposed project and other alternatives including a park and trails. However, the no project alternative avoids all impacts upon environmental resources.

[25] The applicant originally submitted their application for a coastal development permit in 1999. At that time, the project submitted was the same project analyzed as the "Proposed Project" in the FEIR. However, in 2000, the applicant revised their project and selected a variation of Alternative 5 (Reduced Site Coverage with Wetlands Avoidance). Therefore, the "Proposed Project" discussed in the FEIR is not the project that is the subject of this coastal development permit application. Rather, the project now proposed is essentially Alternative 5 discussed in the FEIR.

The FEIR also analyzed a project alternative which would avoid impacts to coastal sage scrub and the California gnatcatcher. However, the FEIR states that this avoidance alternative was rejected in favor of a combination of on-site and off-site mitigation. The rationale stated by the FEIR for preferring this mitigation package was largely founded on the premise that the South Subregion Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP) which is currently being drafted would provide a cumulative regional conservation approach for the California gnatcatcher that would be superior to protecting the resources on the Marblehead project site in place.

6. Analysis

a. Section 30240

The Marblehead site contains various valuable upland habitat areas, including wetlands, Blochman's dudleya, and coastal sage scrub. It is clear that the proposed project will result in significant adverse impacts to the biological resources on the site.

Section 30240(a) of the Coastal Act requires that environmentally sensitive habitat areas be protected against any significant disruption of habitat values and that only uses dependent on those resources can be allowed within ESHA. The proposed project is clearly not consistent with this policy. The Blochman's dudleya areas on the site, which the Commission designates as ESHA, would not be protected against any significant disruption of habitat values. Rather, some of these areas would be destroyed as a result of the proposed development. In addition, if the coastal sage scrub on the site were determined to be ESHA, the proposed development would also impact this ESHA. Further, uses within the ESHAs would not be restricted to those which are dependent on the resources. Housing, commercial facilities, and roads and other infrastructure would be located within the areas now occupied by the ESHAs. These uses are not resource dependent.

Additionally, Section 30240(b) of the Coastal Act requires that development in areas adjacent to ESHA is sited and designed to prevent impacts which would significantly degrade these areas, and is compatible with the continuance of the habitat areas. The development proposed is not consistent with this policy. In this case, the applicant is proposing to eliminate the ESHA. Therefore, the ESHA is not protected and results in the loss of the ESHA.

Typically, to ensure compliance with Section 30240 of the Coastal Act, development (aside from resource dependent uses) must be located outside of all environmentally sensitive habitat areas. Further, development adjacent to an ESHA must provide a setback or buffer between the ESHA and the development of an adequate size to prevent impacts that would degrade the resources. The width of such buffers would vary depending on the type of ESHA and on the type of development, topography of the site, and the sensitivity of the resources to disturbance.

As described above, the applicant is proposing mitigation including the translocation of the Blochman's dudleya habitat. In addition, the applicant is proposing the establishment of certain funding mechanisms for the management of mitigation areas.

However, Section 30240 of the Coastal Act does not provide for such measures in lieu of protecting ESHA resources. A recent Court of Appeal decision [Bolsa Chica Land Trust v. Superior Court, 71 Cal. App. 4th 493, 83 Cal Rptr. 2d 850 (1999)] speaks to the issue of mitigating the removal of ESHA through development by "creating" new habitat areas elsewhere. This case was regarding a Commission action approving an LCP for the Bolsa

Chica area in Orange County. The Commission determined that a eucalyptus grove that serves as roosting habitat for raptors qualified as ESHA within the meaning of Section 30107.5 of the Coastal Act. The Commission found that residential development was permissible within the ESHA under Section 30240 because the eucalyptus grove was found to be in decline and because the LCP required an alternate raptor habitat be developed in a different area.

In the decision, the Court held the following:

> *The Coastal Act does not permit destruction of an environmentally sensitive habitat area [ESHA] simply because the destruction is mitigated offsite. At the very least, there must be some showing that the destruction is needed to serve some other environmental or economic interest recognized by the act.* 83 Cal.Rptr.2d at 853.

The Court also said:

> *[T]he language of section 30240 does not permit a process by which the habitat values of an ESHA can be isolated and then recreated in another location. Rather, a literal reading of the statute protects the area of an ESHA from uses which threaten the habitat values which exist in the ESHA. Importantly, while the obvious goal of section 30240 is to protect habitat values, the express terms of the statute do not provide that protection by treating those values as intangibles which can be moved from place to place to suit the needs of development. Rather, the terms of the statute protect habitat values by placing strict limits carefully controlling the manner uses in the area around the ESHA are developed.* 83 Cal.Rptr. 2d at 858.

Thus, the requirements of Section 30240 of the Coastal Act cannot be met by destroying, removing or significantly disrupting an ESHA and creating or restoring commensurate habitat elsewhere. The Blochman's dudleya is located at the southwestern boundary of the project site on the bluff face as well as within the western canyon. These Blochman's dudleya habitat areas would be destroyed as a result of the proposed bluff stabilization grading and the grading to prepare the western canyon area for construction of houses. In order to protect these resources, grading could not occur within the habitat. Therefore, in this case, the proposed project cannot be approved as submitted because it proposes the destruction of Blochman's dudleya ESHA on the Marblehead site, in violation of Section 30240 of the Coastal Act as interpreted by the Court of Appeal in Bolsa Chica.

Because elimination of adverse impacts to Blochman's dudleya would require significant re-design of the proposed project, the project as proposed cannot be found consistent with Section 30240 of the Coastal Act. As discussed in the "Alternatives" section of these findings, however, feasible alternatives are available that would allow significant development to occur on the site without impacting Blochman's dudleya ESHA.

b. Section 30250

The proposed project involves a property subdivision and construction of new residential and commercial development. Section 30250 of the Coastal Act requires that such development occur where it will not have significant adverse effects, either individually or cumulatively on coastal resources.

The proposed project will result in impacts to wetlands, Blochman's dudleya, coastal sage scrub, and annual and needlegrass grasslands. Notwithstanding the consistency or

inconsistency of these impacts with Sections 30230, 30231, 30233, and 30240 of the Coastal Act, such impacts should be minimized through mitigation or re-design of the project.

For instance, the proposed project will result in impacts to coastal sage scrub which is occupied by California gnatcatcher. If such impacts are unavoidable and are otherwise consistent with Coastal Act policy, such impacts should be mitigated. The U.S. Fish and Wildlife Service and the California Department of Fish and Game have required the purchase of 50 acres containing high quality CSS as mitigation for expected impacts to CSS and gnatcatchers on the Marblehead property.[26] Should those impacts occur, this may be appropriate mitigation in the context of the Coastal Act, even though the mitigation site is outside the coastal zone, because of the high quality of the vegetation, the presence of 12 pairs of resident gnatcatchers, adjacency to other gnatcatcher habitat, and the lack of similar mitigation opportunities near the Marblehead property in the coastal zone.

Also, in order for any of the natural habitats to maintain their existing biodiversity, it is important to maintain coyotes in the system. In the absence of coyotes, these habitats will be subject to heavy predation from domestic and feral cats and other small predators causing avian diversity to plummet.[27] If coyotes are to remain in the system, the various habitats on site must be connected with open space corridors and one or both of the two major drainages must be connected to access ways across the freeway. Recent sightings of coyotes on the Marblehead site suggest that they now utilize culverts or overpasses to gain access.

Marblehead is currently used as a foraging area for several species of birds of prey. The EIR documented the presence of northern harriers, Cooper's hawks, red-tailed hawks, and American kestrels.[28] During the agency visit last spring (April 2000), Commission staff observed a white-tailed kite foraging and a loggerhead shrike perched on a pine snag. There are undoubtedly other diurnal and nocturnal avian predators that forage on the site. However, there apparently has been no formal raptor survey, so the intensity of use by wintering, migrating, and resident birds is not known. However, the grasslands, open scrub, and large trees present on the Marblehead site are probably important to raptors. Protecting the drainages on the property would protect these habitats and insure the continued presence of raptors at the Marblehead property.

The proposed project results in large scale landform alteration which eliminates and/or significantly and adversely modifies the canyons and drainages on the property. This massive landform alteration including the grading and construction of loffelstein wall-supported fill slopes will impact habitat present in these canyon and drainage areas. These activities will eliminate habitat that is important to the continued viability of biological resources on the subject site including wetlands, coastal sage scrub, and raptor foraging habitat, among others. Such impacts could be avoided by concentrating development on disturbed upland areas where habitat values are limited.

F. ACCESS AND RECREATION

Section 30210 of the Coastal Act states:

> *In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities*

[26] Meade, 2000, op. cit.
[27] Crooks, K.R. and M.E. Soulé. 1999. Mesopredator release and avifaunal extinctions in a fragmented system. Nature 400:563-566.
[28] City of San Clemente, 1998, op. cit.

shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30212.5 of the Coastal Act states:

Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.

Section 30213 of the Coastal Act states, in relevant part:

Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

Section 30221 of the Coastal Act states:

Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and forseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

Section 30222 of the Coastal Act states:

The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.

Section 30223 of the Coastal Act states:

Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

Section 30252 of the Coastal Act states:

The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.

1. <u>Land Use</u>

As noted in the project description the applicant is proposing open space areas, a bluff park, trails and bikeways as part of the proposed development. The public access features proposed include dedication of a 9.4 acre "bluff" park, dedication of a 1.0 acre parcel for visitor serving commercial uses, a 1,900 linear foot public trail along the slope of the graded Marblehead Canyon, a 2,300 linear foot public trail on the face of the graded bluffs along El Camino Real, pedestrian and bicycle trails and pathways within or adjacent to proposed Avenida Vista Hermosa, Avenida Pico and El Camino Real, and off-site dedication of a 1.1 acre beachfront parcel of land. The trails will be constructed as part of the proposed project. Meanwhile, no amenities will be constructed at the bluff park, visitor serving commercial parcel, or the beachfront parcel. Rather, the applicant is contributing money to the City of San Clemente for their use in constructing amenities.

Based on the applicants' classification of land uses at the project site, use of land on the 189.6 acre portion of the project site within the coastal zone will consist of approximately 58% (110 acres) residential [of which the applicant indicates 8% (15.2 acres) is open space], 11% (20.8 acres) regional commercial [of which the applicant indicates is 2% (4 acres) is open space], less than 1% (1 acre) visitor serving commercial, 5% (9.4 acres) public open space, 20% (39.1 acres) private open space, and 4% (8.4 acres) public roads. Accordingly, the applicants' classification indicates that 35.7% (67.7 acres) of the project site will be open space and recreation area.

The project site is the last large area of undeveloped land along the coast within San Clemente as well as the last area of undeveloped land between the southern coastal border of Orange County and the Dana Point Headlands. The subject site does not have ocean frontage itself, however, it is across the street from a public beach area. The project site is the last undeveloped area with a vacant bluff top that has expansive views of the Pacific Ocean. Most of the other bluff top areas in San Clemente are developed residential areas.

While the subject site does not have a Commission-certified land use plan, there is a certified land use plan for the remainder of the City of San Clemente. This land use plan contains policies calling for the protection of public access and recreation opportunities in the coastal zone. Policies address the designation of lands for recreation and open space (V.1-V.4), the need to provide adequate recreational needs for new residents so that coastal recreation areas are not overloaded (VII.1), in addition to other policies regarding the provision of public access to the coast.

While the applicant's submittal indicates that 35.7% of the land on the project site will be for open space and recreation, the project raises an issue as to whether the acreage being provided is usable and adequate in relation to the overall size of the site and the fact that the majority of the site in the coastal zone is allocated for gated residential development, a low priority use under the Coastal Act. Of the 189.6 acres in the coastal zone, 9.4 acres are proposed for public recreation as a park. However, at least 3 acres of the 9.4 acre bluff park are occupied by wetlands and proposed coastal sage scrub mitigation. The public would be excluded from this 3 acre area. Other open space includes 15.2 acres of graded slopes within the residential development. This open space is not available to the public. In addition, 4 acres of open space are within the commercial development. However, these areas are graded slopes and setbacks which are not usable as public park or recreation area. There are also 5 acres identified as "perimeter" open space which also has limited value for recreational purposes. In addition, 8.1 acres of bluff face fronting El Camino Real are identified as open space. Of the 8.1 acres of bluff, public use is confined to a trail. There are also 23.9 acres designated as open space within the western canyon and Marblehead Canyon. The western

canyon open space is primarily for habitat avoidance and mitigation. No usable public space exists within this canyon, as proposed. Marblehead Canyon includes a trail but its primary function is for storm runoff retention and mitigation for habitat impacts. The 2.1 acre dudleya preserve will not be open to the general public, except perhaps as an educational study area. Therefore, of the 189.6 acres only 6.4 acres (of the 9.4 acre bluff park) or 3.3% is proposed for public recreation (a high priority use under the Coastal Act), while 110 acres or 58% is gated residential use (a low priority use under the Coastal Act).

The flat bluff top areas of the project site with views of the Pacific Ocean are the lands that are most suitable to support lower cost coastal recreational uses as encouraged under Sections 30213, 30221 and 30223 of the Coastal Act or to provide visitor serving commercial recreation facilities encouraged under Section 30222 of the Coastal Act. Comparable opportunities to advance the public access and recreation policies of the Coastal Act are not available in the San Clemente area because of earlier residential development. However, the flat bluff top areas of the Marblehead site are proposed to be utilized for residential purposes, a lower priority use under the Coastal Act.

In addition, the proposed project devotes only 6.4 acres of the 189.6 acre site for usable recreation area. This 6.4 acres is intended to provide recreational opportunities for the residents of the 424 single family homes that are proposed, as well as the general public. According to the FEIR dated June 1998, this same park is also intended to serve the recreational needs of the large residential development, consisting of several hundred homes, constructed outside the coastal zone, inland of Interstate 5 (known as Marblehead Inland) where public parks were not constructed in favor of the payment of in-lieu fees to the City of San Clemente. Section 30252 of the Coastal Act requires that new development maintain and enhance public access to the coast by assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by providing onsite recreation facilities to serve those residents. The Commission finds that the 6.4 acres of usable public park (which will not be constructed by the applicant and must be constructed by the City) is not adequate to accomplish both of these purposes: serving the recreational needs of new residents of the proposed project and providing lower cost visitor serving recreational facilities for the public.

Furthermore, the value of the proposed Marblehead Canyon trail is also an issue. The value of a trail is comprised of the visitor experience encountered by the trail user, as well as the connection the trail provides between one place and another. The proposed trail would extend from proposed Avenida Vista Hermosa to the bluff park. Any connection through the park to El Camino Real would need to be constructed by the City. No connection is proposed by the applicant. Therefore, unless the City is able to complete the trail using funds the applicant is proposing to pay and any other funds available (which is not guaranteed), the trail may not provide a continuous connection between more inland areas and the coastline. In addition, the trail would be along the westerly slope of Marblehead Canyon. As noted elsewhere, the landform of Marblehead Canyon will be transformed as a result of grading and the construction of stabilization slopes and loffelstein walls and storm water detention basins. Therefore, trail users would experience a manufactured environment of engineered slopes, steep manufactured walls, v-ditch channels, bridges crossing the canyon, among other unattractive features. The quality of the visitor experience on the trail will be nominal and the trail, as proposed, is unlikely to be a draw for coastal zone visitors. Therefore, the visitor serving recreational quality of the trail is low. Rather, the trail will be oriented toward use by the casual passerby.

As also noted above, the proposed project raises an issue regarding the proposed use of 58% of the project site for residential use, a low priority use under the Coastal Act. The June 1998

FEIR states that the proposed project is consistent with Sections 30221, 30222, and 30223 of the Coastal Act in part because a destination resort use of the site is infeasible. The alternatives analysis in the June 1998 FEIR analyzes several hotel oriented alternatives including a 300 room destination resort with a golf course and restaurants, a business oriented hotel, and a lower cost visitor oriented hotel. The alternatives analysis finds that these other alternatives are not viable due to site and economic constraints. For instance, the alternatives analysis states that a destination resort is not feasible at the site because the site does not have certain qualities necessary for a destination resort along the coast such as an unbroken connection with a sandy beach; the lack of an existing championship golf course; and lack of proximity to a well known tourist destination. The alternatives analysis finds that an attraction such as a golf course is necessary in order for a destination resort to be viable because of the lack of other incentives in San Clemente to draw travelers to San Clemente and the project site. The alternatives analysis finds that a business oriented hotel is not feasible because it is not close to a major airport and other business traveler destinations. Finally, the alternatives analysis finds that a lower cost hotel would not be economically feasible.

The alternatives analysis states that a golf course is essential to the viability of any destination resort constructed at the project site. Therefore, it is notable that the Shorecliff Golf Course, a public course, is located approximately 600 feet northwest of the project site. A destination resort could complement this existing course. The alternatives analysis also states that if a golf course were to be constructed at the site the course would need to be constructed in a manner which avoids adverse impacts upon biological resources and which avoids large scale landform alteration. According to the alternatives analysis, such a design would preclude the construction of single family homes at the site because the land would be occupied by the resort and golf course. The alternatives analysis suggests that a project without a residential component is not acceptable. However, construction of a development without a residential component would be entirely consistent with Coastal Act policy which states that residential development is a low priority use in the coastal zone. Furthermore, golf courses are not coastal dependent recreational facilities. Other coastal dependent recreational facilities which require less land area than a golf course could be paired with a resort hotel to add the destination component which the applicant has stated is needed to assure the viability of the resort.

The applicant could also consider other mixtures of development including a hotel or resort and commercial development, utilizing the commercial component to draw visitors to the hotel. The on-site canyons and bluff top areas could be reserved for passive recreation and environmental open space, avoiding impacts upon these areas and allowing for a high quality, low cost visitor experience.

The applicant has also included the dedication of a 1.1 acre oceanfront parcel of land which is off site. This parcel of land would provide an opportunity for low cost visitor access to the coast line. Access to additional beach front property is certainly a high priority under the Coastal Act. However, this offer does not mitigate the proposed use of 110 acres of 189.6 acres of land suitable for visitor serving uses for residential development, a low priority use under the Coastal Act.

Therefore, the Commission finds that the proposed project is not consistent with the public access and recreation policies of the Coastal Act. Therefore, the project must be denied.

2. <u>Pedestrian and Vehicle Circulation and Parking</u>

The proposed project includes residential development that will increase the resident population in the area with attendant traffic and parking demands. In addition, the proposed project includes a commercial component which will increase traffic in the project area and create parking demands. The proposed project also includes a public park area and off-site 1.1 acre ocean front land dedication which will have parking demands if developed with amenities that will draw people to use them.

The public access and recreation policies of the Coastal Act, including Section 30252, require that new development provide adequate circulation and parking and facilitate transit service to assure that public access to the coast is not adversely impacted by the new development. For instance, increases in traffic associated with the development can adversely impact the public's ability to use traffic-impacted roads to access the coast. In addition, if adequate parking or public transportation to serve the development is not available, on-street public parking and/or public parking lots may be used to support the development. Such use of public parking facilities by the new development would displace members of the public trying to access the coast from those public parking facilities, resulting in adverse impacts to coastal access.

The FEIR and Addendum FEIR address project related impacts upon traffic and parking. These documents show that the proposed project will increase traffic demand in the project area. According to the Traffic Analysis prepared by Austin-Foust Associates, Inc. in Appendix 15.4 of the FEIR the proposed project would result in a "capacity deficiency" at Avenida Pico west of Interstate 5. The Traffic Analysis states that Avenida Pico is targeted for widening from four to six lanes under the City's Regional Circulation Financing and Phasing Program (RCFPP) which would mitigate the deficiency. The Traffic Analysis goes on to state that further study confirms the need to implement the widening. The Traffic Analysis also states that the proposed project, in combination with other development approved in the area (outside the coastal zone), will cause the level of service (LOS) to exceed "D", indicating an adverse impact at those intersections.

The applicant is proposing several off-site and on-site mitigation measures to address adverse traffic and circulation impacts. These measure include the payment of fees to the City for off-site improvements at Avenida Pico west of Interstate 5. These fees would be included in a pool of funds from other projects contributing to the adverse conditions at Avenida Pico and Interstate 5 that are being collected by the City. In addition, on-site measures include the construction of Avenida Vista Hermosa from Interstate 5 to Avenida Pico and intersection improvements at proposed Avenida Vista Hermosa and Avenida Pico. The Traffic Analysis concludes that the proposed measures will provide adequate capacity to serve the proposed development which will avoid adverse impacts upon public access to the coast.

In addition to automobile circulation elements, the proposed project also does provide for non-automobile circulation within the development. For instance, the proposed project includes off-street and on-street pedestrian and bicycle paths and lanes. These proposed measures would facilitate public access to the coast.

The proposed project includes 84,313 square feet of commercial space within the coastal zone. The proposed project also includes 1,504 parking spaces within the coastal zone which will serve the proposed development. This commercial space and parking within the coastal zone will be contiguous with 615,827 square feet of commercial space and 2,160 parking spaces located outside the coastal zone. In total, the commercial development within and outside the coastal zone will have 700,140 square feet of commercial space with 3,664 parking spaces.

The Commission has commonly required that commercial development provide 1 parking space for each 50 square feet of public service area for restaurants and 1 parking space for each 225 square feet of general commercial. The proposed development has 48,640 square feet of commercial space proposed for use as restaurants. There are no figures provided by the applicant which identify the amount of restaurant public service area there will be within the 48,640 square feet of restaurant space. However, conservatively identifying all 48,640 square feet of restaurant space as public service area, the project restaurant space within the coastal zone would require approximately 973 parking spaces. The remaining 35,673 square feet of commercial development within the coastal zone would have a demand of approximately 156 parking spaces. In total, using the Commission's commonly used parking guideline, the commercial development within the coastal zone will have a demand of 1,131 parking spaces. The proposed development provides 1,504 parking spaces within the coastal zone. Therefore, on-site parking appears adequate to serve the proposed commercial development.

The proposed project will also have a public park area on-site and an off-site beach front property dedication. No on-site improvements to the park and beach front property are proposed, however, the applicant is contributing money to the City for such uses. These public areas will serve the occupants of the proposed development and the general public. Such use will generate a parking demand. According to the applicants' submittal, there is enough space at proposed Street BBB to provide 60 public parking spaces for the on-site park. However, there is no indication in the applicants submittal of parking opportunities for the proposed off-site beach front land dedication. Section 30212.5 of the Coastal Act requires that public facilities including parking areas be distributed throughout an area to mitigate overcrowding and overuse of any single area by the public. Section 30213 encourages lower cost visitor and recreational facilities. Section 30252 of the Coastal Act requires the provision of adequate parking or public transportation to serve the development. Therefore, the Commission would require assurances that adequate facilities would be constructed to assure public access to the proposed on-site park and off-site beach front parcel.

The proposed project would have adverse traffic impacts which require the implementation of mitigation measures. The proposed project also includes public facilities to which supporting parking would need to be assured. The proposed project also includes pedestrian and bicycle ways which contribute to the overall public access program offered and to which public access would need to be assured. Given that the Commission is denying the project on other grounds, the Commission need not determine which mitigation measures would be appropriate.

G. GEOLOGIC STABILITY

New blufftop development poses potential adverse impacts to the geologic stability of coastal bluffs and to the preservation of coastal visual resources. Coastal bluffs in the City of San Clemente are composed of fractured bedding which is subject to block toppling and unconsolidated surface soils which are subject to sloughing, creep, and landsliding.

Section 30253 of the Coastal Act states:

> *New development shall:*
>
> *(l) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
>
> *(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any*

way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

Section 30235 of the Coastal Act states, in relevant part:

Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply…

1. Bluff Stabilization

There are approximately 2,600 linear feet of 70 to 100 foot high bluffs on the project site. These bluffs are coastal bluffs, however, they are no longer subject to wave energy because the Capistrano Shores mobile home park, railroad tracks and El Camino Real all stand between the Pacific Ocean and the base of the bluffs.

The coastal bluffs at the subject site have been subject to mechanical weathering and landsliding. Bluff material from this weathering and landsliding periodically fell on El Camino Real, requiring lane and road closures. In order to address the lane and road closures and to address public safety issues, the applicant graded approximately 1,800 linear feet of the bluffs in 1990 under Emergency Coastal Development Permit 5-90-274G. This grading operation decreased the slope angle from near vertical to a 1.5:1 to 2:1 slope. In addition, surface drains and sub-drains were installed to address hazards from soil saturation. The applicant is proposing to make this emergency grading permanent under this application.

In order to finish the stabilization work, the applicant is also proposing to grade the remaining approximately 800 linear feet of bluffs in the same manner undertaken in the emergency grading operation. This grading will re-modify approximately 400 linear feet (within the 800 foot section) which were previously graded as part of the Colony Cove bluff stabilization immediately upcoast of the subject site.

The applicants' submittal shows that the factor of safety along the unstabilized portion of the bluffs is below the commonly accepted 1.5 factor of safety. Material sloughing from the bluff regularly collects at the base of the bluff indicating continued erosion. The applicants' submittal indicates that a larger erosion event or landslide could result in closures of El Camino Real and be a hazard to pedestrians, bicyclists, and motorists using El Camino Real. Therefore, the applicant is proposing to stabilize the bluff. The proposed stabilization will have the added benefit to the applicant of allowing the construction of residential structures along the bluffs in this area. However, the proposed stabilization method will result in impacts to an alkali wetland, as well as a population of Blochman's dudleya. Beyond providing calculations that indicate the factor of safety is below 1.5, the applicant has not provided a demonstration that the factor of safety is low enough to require stabilization to protect the road below. For instance, similar to other slopes adjacent to roads throughout the State, the factor of safety may be below 1.5 but is not so low as to necessitate stabilization. Other measures, such as the use of slough walls at the toe of the bluff may address hazard concerns adequately without undertaking the larger grading proposed.

The Commission has found in some other cases that shoreline protective devices that result in impacts to sensitive biological areas are necessary when it is found that such shoreline

protective devices are necessary to protect existing structures and there are no other feasible alternatives. It is not clear that Section 30235 even applies to the proposed stabilization of the remaining ungraded Marblehead bluffs. Section 30235 provides that "[r]evetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted…" Given that substantial development now stands between the Marblehead coastal bluffs and the ocean, the proposed bluff stabilization is unlikely to alter natural shoreline processes. Even if Section 30235 did apply, there is at least one feasible alternative which will achieve the stabilization necessary and which will avoid direct impacts upon the wetlands at Impact Area A. This stabilization involves the use of retaining walls in place of excavation of the bluff and recompaction and recontouring of the bluff materials as an engineered buttress fill. Therefore, the Commission cannot approve the bluff stabilization as submitted.

The proposed bluff stabilization will also result in impacts to a population of Blochman's dudleya which, according to a vegetation survey submitted by the applicant, is present on the bluff face. As noted elsewhere, the Commission finds that Blochman's dudleya is an ESHA. Therefore, pursuant to Section 30240 of the Coastal Act, development must avoid impacts to the ESHA. The proposed project would not avoid such impacts. Even if the stabilization were necessary to protect El Camino Real and were a permitted development under Section 30235 of the Coastal Act, the applicant has not demonstrated that the proposed stabilization is the least environmentally damaging feasible alternative. For instance, the Marblehead Coastal Bluffs Emergency Grading Program Focused EIR dated April 15, 1991, identifies at least one other alternative which would require minimal grading through the use of retaining walls (Exhibit 26) and which would reduce or avoid impacts to the Blochman's dudleya.

2. El Camino Real Retaining Wall

The proposed project also includes the construction of a retaining wall along the El Camino Real at the boundary of the Blochman's dudleya reserve at the southwestern corner of the project site (Exhibit 12). This wall is being constructed as part of the proposed widening of El Camino Real. Commission staff's Senior Geologist has reviewed the information associated with the retaining wall and has determined that the wall does provide an adequate factor of safety for the static condition. However, the applicant has not demonstrated that the wall will be safe for the seismic condition. Therefore, the Commission cannot conclude that the wall will assure structural integrity, as required by Section 30253 of the Coastal Act.

In addition, the applicants' submittal[29] recommends the use of clean sand or gravel as a backfill for the retaining wall in order to mitigate for the strong expansion potential of the native soils. As reported in the applicants' submittal "Use of soil having high expansion potential (as is present at the subject site) as wall backfill may result in very high lateral soil pressure on the walls." Since the design and stability calculations assume that clean sand or gravel will be used for backfill, the wall design requires that the entire soil wedge acting on the wall be composed of imported clean sand or gravel. Accordingly, grading will be required in this area to remove the existing soils and backfill with the engineered material. It is unclear from the applicants' submittal that the excavation can be undertaken without disturbance to the existing *Dudleya* reserve. Further, even upon completion of the wall, the applicants' submittal states that "the slope overlying the wall could be subject to isolated pockets of surficial failure." The report goes

[29] Leighton and Associates 2000, "Review of the bluff slope and proposed retaining wall along north El Camino Real on the boundary of the Dudley reserve, Marblehead Coastal Property, tentative tract 8817, City of San Clemente, California", 3 p. letter report to Mr. Jim Johnson dated 22 August 2000 and signed by T. Lawson (CEG 1821; PE 53388).

on to indicate that development at the top of the slope will be protected from such surficial slumping and potential slope retreat because the "area at the top of the slope will be occupied by the Dudley [sic] Natural Reserve, which is expected to provide an adequate setback…" Clearly, it was not the intent of the *Dudleya* preserve to provide setback for the proposed development, and its use as a stability buffer is not appropriate.

Just as a non-expansive backfill was recommended behind the El Camino retaining wall, it should be noted that native materials with a high expansive potential could damage the loffelstein walls proposed for the fill slopes along the canyon walls throughout the project. Alternative backfills or some type of reinforcement of the loffelstein walls may need to be considered. Damage to these walls could cause subsequent damage to the upslope structures, as well as the downslope wetlands and habitat areas. Without assurance that any retaining structures will not require future protection and attendant impacts, the Commission cannot find that the proposed project is consistent with Section 30253 of the Coastal Act.

3. Foundation Designs

Foundation designs for both residential and commercial structures are discussed in a general way in the applicants' submittal, however, no final foundation plans were submitted by the applicant. The purpose of requesting the applicant to supply foundation plans was to ascertain whether the development could take place without being subject to, or contributing to, geologic instability at the site, in accordance with section 30253 of the Coastal Act. Of particular concern is the highly expansive and severely corrosive nature of the soils at the site. In place of actual foundation designs, the applicant supplied a document titled Geotechnical recommendations for the design of foundations for the residential and commercial buildings, Marblehead Coastal Property, tentative tract 8817, City of San Clemente, California, Coastal development permit 5-99-260 by Leighton and Associates dated August 31, 2000. Foundation design parameters were supplied by the applicant which identify the allowable bearing capacities for foundation footings and geotechnical parameters for post-tensioned foundation slab design. The Commission finds that these design parameters are adequate, and the structures should be consistent with section 30253 if built in accordance with the recommendations by Leighton and Associates.

4. Stability of Detention Basins on Canyon Slopes

The Commission notes that there has been no stability analysis to demonstrate the stability of the canyon slopes adjacent to the proposed detention basins. Such an analysis must be undertaken to demonstrate that these slopes will not fail during static or seismic loading. These analyses should assume saturated soil conditions and surcharging by water in the basins to their design capacity. In absence of this information, the Commission cannot find that the proposed project is consistent with Section 30253 of the Coastal Act.

5. Alternatives and Conclusion

There are alternatives which would avoid impacts associated with geologic conditions at the site. For instance, there are alternatives for stabilizing the bluffs using retaining walls which result in an adequate factor of safety and which avoid or minimize impacts to wetlands and Blochman's dudleya. In addition, there are approximately 112 acres of more level lands outside of the canyons. Accordingly, the applicant does not need to construct development within the canyons and could avoid the use of loffelstein walls within the canyons. Furthermore, any detention basins could be located outside the canyon, reducing issues related to the stability of

these structures. Avoidance of construction within the canyons would also address other Coastal Act issues raised elsewhere in this staff report.

Therefore, the Commission finds that the project, as proposed, is not consistent with Section 30253 of the Coastal Act. Therefore, the Commission must deny the proposed project.

H. SHORELINE SAND SUPPLY

Section 30233(d) of the Coastal Act states:

> *(d) Erosion control and flood control facilities constructed on water courses can impede the movement of sediment and nutrients which would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline in accordance with other applicable provisions of this division, where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before issuing a coastal development permit for such purposes are the method of placement, time of year of placement, and sensitivity of the placement area.*

Section 30235 of the Coastal Act states:

> *Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.*

The proposed project will entail development of a coastal drainage which presently supplies sand to the beach. The applicant has submitted studies which estimate the potential impacts of the proposed development on sediment supply to the beach[30] [31] [32] [33] [34] [35]. The studies suggest that both peak flows and 24-hour runoff volumes will be greatly decreased as a result of the development. This result demonstrates the efficiency of the stormwater management system; the goal of such systems is to counteract the natural tendency for runoff during storm events to increase as a result of development. From a resource point of view, reduced flow velocities and volumes will diminish the capacity of streams to carry sediments, and could reduce the delivery of sand to the beach.

Sediment delivery to the beach is analyzed using the 100-year and 10-year storm events and

---

[30] RBF Consulting 2000, "Marblehead Coastal 5-99-260 (MT No.1, LLC), reply to staff response letter of August 11, for coastal development permit application", 8 p. letter to Karl Schwing dated 23 August 2000 and signed by M. N. Nihan.
[31] Unattributed data, "Table 1. Comparison of existing and proposed hydrologic conditions in the central and western canyons", 1 p. table, undated and unsigned.
[32] Unattributed data, "Table 2. Comparison of existing and proposed hydrologic conditions under El Camino Real", 1 p. table, undated and unsigned.
[33] Unattributed data, "Table 3. Comparison of existing and proposed hydrologic conditions in Marblehead Canyon small area hydrograph", 1 p. table, undated and unsigned.
[34] RBF consulting report "Addendum 5: Marblehead Coastal Preliminary Stormwater Management Plan, Water Quality and Quantity Assessment," dated May 2000 and unsigned (and addendum 5A, continuation of appendices).
[35] RBF Consulting letter "Marblehead Coastal 5-99-260 (MT No. 1, LLC) Reply to staff response letter of May 17, 2000, for Coastal Development Permit Application," to Mark Schwing from Michael J. Burke, dated 11 July 2000.

the Universal Soil Loss Equation. The volume of sand delivered to the ocean under existing conditions, as predicted from their models, is very small. Further, the applicant provides evidence that most of the material that is currently carried by the streams on the project does not reach the beach. Nevertheless, the post-project does result in impacts to the beach, however small. Given the declining width of beaches in San Clemente[36], especially those in the project area, the proposed development must provide mitigation to address the impacts from the project.

The applicant is proposing to export approximately 30,000 cubic yards of "beach quality" sand for use for beach nourishment. The Commission could find the proposed project, with appropriate conditions to assure the implementation of mitigation, is consistent with Sections 30233(d) and 30235 as they pertain to shoreline sand supply. However, the Commission is denying the proposed project on other grounds outlined elsewhere in these findings.

I. WATER QUALITY

Section 30231 of the Coastal Act states:

> *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

The proposed project will result in the subdivision and grading of the 189.6 acre portion of the project within the coastal zone. Additional grading will occur outside the coastal zone. The implementation of the project will result in two phases where potential impacts upon water quality would occur: 1) the construction phase; and 2) the post-construction phase including the commitment of an 189 acre area for commercial and residential purposes. Construction phase impacts include erosion and sedimentation of coastal waters during grading. Post-construction phase impacts relate to the use of the proposed project, a residential and commercial subdivision. Run-off from commercial and residential developments is commonly polluted with petroleum hydrocarbons including oil and grease from vehicles; heavy metals; synthetic organic chemicals including paint and cleaners; soap and dirt from washing vehicles and patio areas; dirt and vegetation from yard and grounds maintenance; litter; fertilizers, herbicides, and pesticides; and bacteria and pathogens from animal waste. The discharge of these pollutants to coastal waters can cause: eutrophication and anoxic conditions resulting in fish kills and diseases and the alteration of aquatic habitat, including adverse changes to species composition and size; excess nutrients causing algae blooms and sedimentation increasing turbidity which both reduce the penetration of sunlight needed by aquatic vegetation which provide food and cover for aquatic species; disruptions to the reproductive cycle of aquatic species; and acute and sublethal toxicity in marine organisms leading to adverse changes in reproduction and feeding behavior. These impacts reduce the biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes and reduce optimum populations of marine organisms and have adverse impacts on human health.

[36] City of San Clemente, Beach Ad Hoc Committee, "The State of San Clemente's Coastal Zone and Beaches", undated.

Water quality in the City of San Clemente has been subject to degradation in recent years. For instance, according to a recent study titled The State of San Clemente's Coastal Zone and Beaches by the San Clemente Beach Ad Hoc Committee, San Clemente's beaches have been closed on many occasions as a result of water pollution. The study points to the need to ensure that new development is constructed in a manner which controls polluted run-off and treats the run-off so that coastal waters are not adversely impacted.

In order to identify for the Commission the non-structural, routine structural and special structural BMPs the applicant is proposing to use to address post-construction water quality impacts from the proposed development, the applicant has submitted the Marblehead Coastal Water Quality Plan prepared by RBF Consulting dated July 7, 2000. The applicant's proposed water quality plan is designed with the "treatment train" approach in mind, and includes source and treatment control Best Management Practices (BMPs). Source control BMPs such as the use of landscaping plans which include primarily native or adapted drought tolerant landscaping in common areas will serve to reduce the need for application of fertilizers, pesticides and intense irrigation. Further the plan includes the use of efficient irrigation systems for common space in the commercial and residential areas, which should serve to prevent nuisance runoff from excess irrigation.

The plan involves non-structural BMPs such as street sweeping in both the commercial and residential areas. The type of sweeper to be utilized is not specified. The Commission would recommend that vacuum regenerative air sweepers be utilized for this purpose. Treatment control BMPs such as "fossil filter" catch basin insert devices, or equivalent filtration devices are proposed for installation in all catch basins.

Year-round diversion of dry weather nuisance flow run-off (i.e. non-storm related discharges from activities such as vehicle washing and over-irrigation) from the commercial area, the residential area, and from off-site sources including the freeway, and existing upstream residential development, to the City of San Clemente Water Reclamation Plant, for treatment is proposed.

In the Commercial area, in addition to nuisance flow, the "first flush" of storm water runoff will be captured and contained in an underground storm drain system. Flow will then be released to the Reclamation Plant, under controlled conditions regulated electronically by City operators. Diverted runoff will be pre-treated before entering the Reclamation Plant facilities. All diverted runoff will be treated at the Plant, and released through the SERRA outfall. In the future, the City plans to implement the first phase of the City's Reclaimed Water Master Plan. When this occurs, diverted runoff may be treated to reclaimed water standards, recycled and distributed to the Marblehead property and/or others. While the City indicates that they do not currently have the necessary facilities such as a pump station, reservoir, and distribution lines necessary to implement the Reclaimed Water Master Plan, the Marblehead development should be designed with dual plumbing where appropriate, to allow a "ready" connection to distribution lines from the Plant, when they become available.

The diversion of year round nuisance flows from the proposed development will serve to eliminate potential impacts on coastal water quality associated with such flow, thereby protecting public access and recreational opportunities at North Beach. Further the diversion of the "first flush" runoff from storm events which typically contains a disproportionately high pollutant loading, from the regional commercial areas, to the Reclamation Plant for treatment, will further serve to minimize impacts associated with stormwater runoff from urban development, on coastal resources. This measure will provide a source of water, which can be

reclaimed and recycled pending the City's implementation of the Master Plan, furthering the City's goals related to water conservation.

With the exception of a 4.5 acre residential area discussed below, stormwater from the proposed development (beyond the first flush from the commercial area) and from the residential areas is directed to detention basins (3 total are proposed). Dry weather flows from the residential area will also flow through the detention basins prior to diversion into the sewer at El Camino Real. The detention basins will function as flood control devices controlling the volume and velocity of storm runoff. Wetland vegetation, which will be planted in the basins, is also expected to provide a water quality treatment function. Addendum 5, to the Preliminary Stormwater Management Plan dated May 2000 discusses TSS removal efficiency of wet detention basins. This report indicates that the basin efficiency for the proposed development was calculated to range from approximately 84% to 96%. Basin efficiency is high due to the exceptionally large storage volume available in the detention basins. However, it is unclear whether this capacity will be used to increase draw down time for smaller runoff events captured, thereby enhancing the basin efficiency. Therefore, the Commission recommends that detention basins be designed with the capability of providing a draw down time of 40 hours, for representative runoff events such as 2-year, 24-hour or other interval.

Stormwater runoff from the 4.5-acre residential area mentioned above is proposed to discharge into Marblehead Canyon. The applicant proposes to create a small impoundment for the water, with a low berm, for the purpose of establishing new wetlands. Strictly from a water quality standpoint, any discharge into the Canyon should be pre-treated or filtered, prior to discharge. Additionally, discharge would have to be controlled to prevent scour and erosion at the base of the canyon.

The applicant has considered post-construction BMP numeric sizing criteria established by the San Diego Regional Water Quality Control Board (SDRWQCB), currently proposed to be included in the municipal stormwater permit. This numeric criteria is similar to the design goals, recently imposed by the Commission for post-construction BMPs associated with past development of similar type and intensity. The applicant contends that the treatment train, including diversions, will meet the proposed requirements of the SDRWQCB.

The proposed water quality plan contains many important elements which will serve to reduce the adverse impacts of urban runoff on coastal resources. If BMPs are collectively sized in a manner consistent with the SDRWQB identified criteria and design goals recently imposed by the Commission in developments of similar type and intensity, the water quality plan will *contribute* to development compliance with the water and marine resource policies of the Coastal Act. "Contribute" is emphasized, as pollutant control and removal from stormwater and nuisance runoff, and flood control measures are but pieces in an overall resource management plan, which must be integrated with other inter-related components of such a plan, in order to ensure comprehensive resource protection.

Further, aspects of the plan such as the diversion system, and permanent operation and maintenance of BMPs are reliant, as proposed, upon entities (the City and a Homeowner's Association) other than the applicant. In order to ensure the plans and maintenance responsibilities are carried out as proposed by the applicant, supporting implementation measures may need to be incorporated into any approval, such as funding mechanisms, and/or agreements executed between all parties involved.

Other critical components such as hydrology and site constraints with respect to geologic

features and sensitive habitat areas must be considered when planning the location of structural BMPs and water quality features such as detention basins. Hydrologic concerns associated with groundwater conditions and wetlands, are noted elsewhere in these findings. In addition, other resource issues may potentially affect the water quality plan when changes to the project are implemented as a result of this Commission action.

With the implementation of the measures outlined above, the water quality treatment plan, as it relates to run-off from the project, could be considered consistent with Section 30231 of the Coastal Act. However, there are other water quality issues raised by the project which are addressed elsewhere in these findings which have caused the Commission to find that the proposed project is inconsistent with Section 30231 of the Coastal Act.

J. ARCHAEOLOGICAL RESOURCES

Section 30244 of the Coastal Act states:

> *Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.*

According to the EIR, several archeological investigations of the Marblehead site have occurred over time, including investigations in 1974, 1979, 1989, 1990. These investigations revealed the presence of one archaeological site, CA-ORA-1258, along the bluffs on the Marblehead site. A subsequent study performed in 1996 failed to locate CA-ORA-1258. It is suspected that the emergency grading which occurred in 1990 destroyed CA-ORA-1258. No other archeological sites have been recorded on the Marblehead property, according to the EIR. However, scattered evidence of archaeological and paleontological resources have been found. In addition, grading activities could reveal archaeological or paleontological resources not visible from the surveys which occurred to date.

In order to assure that development is undertake consistent with Section 30244 of the Coastal Act, the Commission would require that the State Office of Historic Preservation ("OHP"), the state Native American Heritage Commission ("NAHC"), and the Native American group/person deemed acceptable by NAHC, have the opportunity to review and comment on the applicants' research design. In addition, the Commission would require that a Native American monitor, oversee the archaeological activities. The Native American monitor must be selected by the City in accordance with NAHC guidelines in consultation with the Native American group/person deemed acceptable by the NAHC.

In addition, it is possible that the archaeological test program missed cultural resources that are then discovered during development activities. Therefore, the Commission would require that development be temporarily halted in the vicinity of any discovery site until appropriate mitigation measures are developed for resources discovered during the course of post-investigation construction activities. Also, to ensure that contractors and workers are notified of their obligations related to archeological conditions at the site the Commission would require that the terms of obligation be incorporated into all documents that will be used by contractors and workers for construction related activity, including bids. While the Commission is denying the proposed project on other grounds, the Commission could find that, with implementation of the above measures, the project would be consistent with Section 30244 of the Coastal Act.

K. LOCAL COASTAL PROGRAM

Section 30604(a) of the Coastal Act provides that the Commission shall issue a coastal permit only if the project will not prejudice the ability of the local government having jurisdiction to prepare a Local Coastal Program which conforms with Chapter 3 policies of the Coastal Act. The Commission certified the Land Use Plan for the City of San Clemente on May 11, 1988, and certified an amendment approved in October 1995. On April 10, 1998, the Commission certified with suggested modifications the IP portion of the Local Coastal Program. The suggested modifications expired on October 10, 1998. The City submitted a second IP in June 1999. That submittal was subsequently withdrawn in October 2000.

The Commission has found that the proposed project is not consistent with Sections 30213, 30221, 30222, 30222, 30223, 30230, 30231, 30233, 30240, 30252, and 30253 of the Coastal Act. In addition, the proposed project would result in the alteration of natural landforms, impacts upon biological resources, and impacts upon public access and recreation inconsistent with the land use plan which has been certified for the remainder of the City. Therefore, approval of the proposed development will prejudice the City's ability to prepare a Local Coastal Program for San Clemente that is consistent with the Chapter 3 policies of the Coastal Act as required by Section 30604(a). Therefore, the project must be denied.

L. ALTERNATIVES

The proposed project will result in the large scale alteration of natural landforms on the project site. Most significant are the proposed grading and construction of loffelstein walls which result in the fill of one canyon, the narrowing of the western and Marblehead canyons, and the steepening of the walls of the western and Marblehead canyons. This landform alteration causes significant impacts upon natural landforms as well as upon visual quality. The landform alteration also has significant adverse impacts upon wetlands and wetlands buffers as well as other biological resources on the site. The proposed project also commits a significant portion of the site suitable for visitor serving commercial and/or lower cost visitor serving uses, which are higher priority uses under the Coastal Act, for residential purposes, a lower priority use.

There are alternatives which would lessen or avoid the significant adverse impacts the proposed project has upon coastal resources. For instance, development could be concentrated on the approximately 112 acres of relatively flat land that is outside of the canyons. Such concentration could avoid the landform alteration within the canyons and could avoid the attendant impacts associated with those landform alterations including adverse impacts upon wetlands and other biological resources. In addition, there are alternative land uses which would reduce or avoid adverse impacts upon public access and recreation opportunities within the coastal zone. For instance, the flat areas outside the canyons could be used for visitor serving commercial uses such as restaurants, smaller scale hotel, or other visitor serving venue. Alternative coastal dependent visitor serving destination attractions could also be considered in combination with a hotel to create a destination resort at the site.

There are also specific alternatives presented by the applicant which would avoid or minimize impacts upon coastal resources (Exhibits 23 – 26). For instance, there are alternative bluff stabilization measures including the use of retaining walls in place of stabilization fills which would avoid or reduce direct impacts upon wetlands and Blochman’s dudleya. There are also hazard avoidance and management measures, such as the use of setbacks and debris walls, which would avoid the need for either stabilization fills or retaining walls, which could address bluff stability issues. There are also alternative alignments of the proposed El Camino Real widening and Street BBB which would avoid the direct fill of wetlands at the project site.

M. CONSISTENCY WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Section 13096 of Title 14 of the California Code of Regulations requires Commission approval of coastal development permits to be supported by a finding showing the permit, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

As explained above and as incorporated here by reference, the proposed project is inconsistent with Sections 30213, 30221, 30222, 30223, 30230, 30231, 30233, 30240, 30252, and 30253 of the Coastal Act due to adverse impacts upon natural landforms, adverse impacts upon biological resources including wetlands and Blochman's dudleya; adverse visual impacts related to landform alteration; and adverse impacts upon public access and visitor serving recreation opportunities in the coastal zone. In addition, the applicants have not provided the Commission with sufficient information to adequately analyze impacts of the proposed project on native habitat, hydrology, water quality, and geologic stability. The Commission has also found that there are feasible alternatives which would avoid such impacts. Therefore, the Commission finds that the proposed project is inconsistent with the California Environmental Quality Act. Therefore, the proposed project must be denied.

APPENDIX A

SUBSTANTIVE FILE DOCUMENTS

Environmental Impact Reports

- Marblehead Coastal Bluffs Emergency Grading Program Focused Environmental Impact Report (SCH No. 90011085) prepared by Ed Almanza and Associates dated April 15, 1991

- Final Environmental Impact Report, Marblehead Coastal, General Plan Amendment 96-01, Specific Plan 95-02, Tentative Tract Map (SCH No. 95091037) prepared for the City of San Clemente by David Evans and Associates, Inc. of Laguna Hills, California prepared June 1998 and adopted August 5, 1998.

Biology

- 1991 Biological Assessment Update Marblehead Coastal Project Site, San Clemente, California prepared for Ed Almanza & Associates by Fred M. Roberts, Jr. dated January 23, 1991 contained within Appendix E of Marblehead Coasal Bluffs Emergency Grading Program Focused Environmental Impact Report (SCH No. 90011085) prepared by Ed Almanza and Associates dated April 15, 1991

- Marblehead Coastal Resource Management Plan dated October 1997 and revised January 1998 prepared by Robert Bein, William Frost & Associates.

- Marblehead Coastal Project, Preservation, Restoration and Management Plan for Wetlands, Sage Scrub and Other Upland Habitats dated July 7, 2000 prepared and compiled by Robert Bein, William Frost & Associates

- Memorandum from R.J. Meade Consulting to California Coastal Commission dated November 28, 2000 regarding coastal sage scrub, on-site and off-site mitigation, and environmentally sensitive habitat areas.

- Letter from Glenn Lukos Associates to RBF Consulting regarding Changes to Upland Coastal Scrub Vegetation on Marblehead Coastal Site between 1976 and 2000 dated September 28, 2000 and affiliated documentation compiled and submitted by RBF Consulting dated September 29, 2000.

- Letter from Glenn Lukos Associated to RBF Consulting regarding Shading Study Associated with Proposed Bridges Spanning Existing Wetlands on Marblehead Coastal, San Clemente, California.

- Letter from Leighton and Associates to MT No. 1, LLC regarding Anticipated Groundwater Conditions, Marblehead Coastal Project, City of San Clemente, California dated June 15, 2000 (Project No. 881898-009).

- Letter from Leighton and Associates to MT No. 1, LLC regarding Assessment of Pre and Post Development Groundwater Conditions Utilizing Site-Specific Data, Marblehead Coastal Project, City of San Clemente, California dated August 22, 2000

- Letter from Glenn Lukos Associates to RFB Consulting regarding Hydrological Requirements of Alkali Marsh and Alkali Meadow Vegetation on Marblehead Site, San Clemente, California dated August 22, 2000.

- Letter from Glenn Lukos Associates to RBF Consulting regarding Wetlands Avoidance of 'Area A' dated September 20, 2000

- Letter from Glenn Lukos Associates to RBF Consulting regarding Wetlands Avoidance of 'Area C' dated September 20, 2000

- Letter from RECON to California Coastal Commission regarding the Blochman's dudleya Translocation Project at Marblehead Bluff dated June 19, 2000

- Letter from F.M. Roberts to San Clemente Citizens for Responsible Development regarding Alkali Wetlands within the Marblehead Development Project dated February 29, 2000

- Letter from Rancho Mission Viejo to MT No. I, LLC regarding Confirmation of Available Mitigation Lands and Credits dated July 7, 2000

Geology

- Letter from Leighton and Associates to MT No. 1, LLC regarding Recommendations for Slope Setbacks, Marblehead Coastal, Tentative Tract Map 8817/Site Plan Permit 97-16, City of San Clemente, California dated April 12, 2000

- Letter from Leighton and Associates to MT No. 1, LLC regarding Response to California Coastal Commission Review Sheet dated May 17, 2000, Marblehead Coastal, Tentative Tract Map 8817, Coastal Development Permit Application 5-99-260, City of San Clemente, California dated June 15, 2000

- As-Graded Geotechnical Report of Rough Grading Operations Emergency Bluff Stabilization – Phase I, Marblehead Coastal, City of San Clemente, California, dated June 15, 2000, by Leighton and Associates (Project No. 881898-009).

- Letter from Leighton and Associates to MT No. 1, LLC regarding Geotechnical Review of Bluff Stability and Wetlands Along El Camino Real, Marblehead Coastal, Tentative Tract Map 8817/Site Plan Permit 97-16, City of San Clemente, California dated June 15, 2000

- Letter from Leighton and Associates to MT No. 1, LLC regarding Geotechnical Review of Alternatives 1 and 2, for the Existing Season Wetland, Wetland Avoidance Plans, Marblehead Coastal, Tentative Tract Map 8817/Site Plan Permit 97-16, City of San Clemente, California dated June 6, 2000 and revised June 15, 2000 which pertains to Impact Area C.

- Letter from Leighton and Associates to MT No. 1, LLC regarding Review of the Bluff Slope and Proposed Retaining Wall Along North El Camino Real on the Boundary of the Dudley [sic] Reserve, Marblehead Coastal Property, Tentative Tract 8817, City of San Clemente, California dated August 22, 2000

- Letter from Leighton and Associates to MT No. 1, LLC regarding Geotechnical Review of Foundation Options for the Residential and Commercial Buildings Proposed at the Marblehead Coastal Property, Tentative Tract 8817, City of San Clemente, California, Coastal Development Permit 5-99-260 dated August 22, 2000

- Letter from Leighton and Associates to MT No. 1, LLC regarding Geotechnical Recommendations for the Design of Foundations for the Residential and Commercial Buildings...dated August 31, 2000

- Letter from Leighton and Associates to MT No. 1 LLC regarding Response to Item E of the California Coastal Commission letter dated August 11, 2000, Pertaining to the Marblehead Coastal Property...dated September 18, 2000 which addresses geotechnical feasibility of avoiding wetland impacts at Tributary A.

- Letter from Leighton and Associates to MT No. 1 LLC regarding Response to Item F of the California Coastal Commission letter dated August 11, 2000, Pertaining to the Marblehead Coastal Property...dated September 18, 2000 which addresses geotechnical feasibility of avoiding wetland impacts at Impact Area C.

- Letter from Leighton and Associates to MT No. 1 LLC regarding Estimated Remedial Quantities Pertaining to the Grading of Marblehead Coastal Property, Tract 8817, City of San Clemente, Coastal Development Permit 5-99-260 dated September 14, 2000

Resource Agency Letters

- Letter from U.S. Fish and Wildlife Service and California Department of Fish and Game to the City of San Clemente regarding Conditional Concurrence with the Special 4(d) Rule Interim Habitat Loss Mitigation Plan (IHLMP) for the Marblehead Coastal Development Project, MT No. 1, LLC, City of San Clemente, California dated August 17, 2000

- Letter from the California Department of Fish and Game to California Coastal Commission regarding Comments on the Marblehead Coastal Project Wetland Delineation dated June 26, 2000

- Letter from the California Department of Fish and Game to the California Coastal Commission regarding Comments on the Marblehead Coastal Project Wetland Delineation dated August 29, 2000

Letters from City of San Clemente

- Letter from the City of San Clemente Engineering Division to the California Coastal Commission regarding the SERRA Land Outfall dated September 8, 2000

- Letter from the City of San Clemente Engineering Division to the California Coastal Commission regarding Reclaimed Water Availability dated September 8, 2000

- Letter from the City of San Clemente Community Development Department to the California Coastal Commission regarding Beachfront land dedication to public entity dated July 3, 2000

Coastal Development Permit Application Files

A-80-7433; 5-90-122-G; 5-90-274 (Lusk Company); 5-90-274-G (Lusk Company); 5-94-256 (City of San Clemente), 5-94-256A (City of San Clemente), and G5-94-256 (City of San Clemente); 5-94-263 (Lusk Company); 5-97-136 (Marblehead Coastal, Inc.)

APPENDIX B

APPLICANT'S PROJECT DESCRIPTION

In a letter to the Commission dated July 11, 2000, the applicant provided the following project description:

Residential

- *Residential neighborhoods consisting of 424 single-family detached homes on a 95.7 acres on privately maintained, gated streets.*

Commercial

- *Eight commercial buildings containing 84,313 square feet of building floor area on 16.8 acres within a 59.3 acre visitor-serving commercial center of which 42.5 acres are outside of the Coastal Zone.*

- *1.0 acres designated for visitor serving commercial use near North Beach. This site will be graded only and will be dedicated to the City of San Clemente.*

- *Contribution of $1,000,000 to the City for the enhancement of the downtown business district, of which a significant portion is in the Coastal Zone.*

Open Space, Public Access and Recreation

- *Acquisition and public dedication of 1.1 acres of beachfront property, including 440 lineal feet of beach front property.*

- *67.7 acres of public and private on-site open space.*

- *9.4 acre public passive use bluff park. (7 acre public sports park is outside and adjacent to Coastal Zone not included).*

- *Contribution of $2,000,000 to the City for park improvements, including both the Bluff Top Park and the Sports Park.*

- *1,900 lineal feet of public trail linking the visitor serving commercial center to the bluff park within the central canyon.*

- *2,300 lineal feet of elevated bluff trail and three vista points along El Camino Real.*

- *Pedestrian and bicycle trails and pathways in or adjacent to 8,500 lineal feet of Avenida Vista Hermosa (includes scenic corridor trail), Avenida Pico and El Camino Real.*

- *On-site coastal public access route roadway improvements of Avenida Vista Hermosa (new), Avenida Pico (widening) and El Camino Real (widening).*

- *Contribution of $7,200,000 to the City for off-site circulation improvements that included improvements to primary coastal access routes, such as construction of Avenida Vista Hermosa freeway interchange and improvements to Avenida Pico freeway interchange.*

- *Provision of a new access road outside the coastal zone to Shorecliffs Middle School to alleviate existing traffic congestion in the Coastal Zone.*

- *Contribution of $1,465,437 ($3,456.22 per dwelling unit) to the City for the improvement of the North Beach area.*

- *Visitor serving uses including restaurants, a movie complex and public viewing plaza areas located within the visitor serving commercial center.*

Habitat Protection and Enhancement

- *Preservation of 4.78 acres of wetlands.*

- *Completion of the 2.9 acre Dudleya Reserve in accordance with the translocation plan.*

- *Creation of 0.93 acres of wetlands in wetland basins to off-set impacts to 0.84 acres of non-wetland ephemeral waters inside and outside the coastal zone.*

- *Restoration and enhancement of 0.18 acres of wetlands within the central canyon to off-set impacts of 0.09 acres of wetlands in the Coastal Zone.*

- *Construction of Loffelstein walls landscaped with Coastal Sage Scrub within the central and western canyons to protect wetlands.*

- *Preservation of 2.97 acres of Coastal Sage Scrub.*

- *Restoration and enhancement of 16.57 acres of sage scrub habitat.*

- *Translocation of 0.3 acres of needlegrass habitat.*

- *Acquisition of development rights and establishment of a conservation easement for 50 acres of off-site containing 30 acres of existing coastal sage scrub, including 12 pairs of California Gnatcatchers.*

- *Contribution of $100,000 to the property owner's association for long-term on-site habitat management.*

- *Contribution of a onetime fee of $250 per dwelling unit ($106,000) for long-term off-site habitat management.*

- *Implementation of water quality program which includes source reduction, on-site treatment and diversion to the City of San Clemente Water Reclamation Plant.*

Infrastructure

- *Six bridges to protect the wetlands.*

- *Contribution of $250,000 for the improvement of the San Clemente Public Library, located within the Coastal Zone.*

- *Contribution of $1,000,000 to the City for senior citizens.*

- *Contribution of $4,200,000 to Capistrano Unified School District, which is $1,800,000 more than required amount.*

- *All work performed to date including grading and mitigation in connection with Phase I emergency grading performed on the El Camino Real bluffs.*

- *Grading required to implement the project.*

- *A water system to serve the site and approved services and reliability for existing development in the Coastal Zone.*

- *Extension of the reclaimed water system to provide future service to off-site areas inside and outside the Coastal Zone.*

- *A system to provide reclaimed water to the project when available.*

- *A flood control system which will eliminate existing flooding of El Camino Real as well as protect existing on-site habitat.*

- *Utilities to serve the project.*